

ISLAMIC HISTORY A FRAMEWORK FOR INQUIRY

REVISED EDITION

R. STEPHEN HUMPHREYS

PRINCETON UNIVERSITY PRESS

PRINCETON, NEW JERSEY

NOTICE: This material may be protected
by Copyright law (Title 17, U.S. Code)

Humphreys, Stephen "The sources: an analytical survey". Islamic history: a framework for inquiry. Princeton, NJ: Princeton University Press, 1991. 25-65

ISBN: 0691031452

MASON/OCR

SAS14091813.pdf

4 SOURCES AND RESEARCH TOOLS

2. University of Chicago. *Catalog of the Middle East Collection. First Supplement* (1977).
3. New York Public Library, Reference Department. *Dictionary Catalog of the Oriental Collection* (16 vols., 1960).
4. New York Public Library, the Research Libraries. *Dictionary Catalog of the Oriental Collection. First Supplement* (8 vols., 1976).
5. Harvard University. *Catalogue of Arabic, Persian, and Ottoman Turkish Books* (5 vols., 1968).
6. Harvard University. *Catalog of the Arabic Collection* (6 vols., 1983).
7. School of Oriental and African Studies, University of London. *Library Catalogue* (28 vols., 1963). *First Supplement* (16 vols., 1968). *Second Supplement* (16 vols., 1973). *Third Supplement* (19 vols., 1979).
8. British Museum. *Catalogue of Arabic Printed Books in the British Museum* (3 vols., 1894–1901). *Supplementary Catalogue* (1926). *Second Supplementary Catalogue* (1959).
9. British Library. *Third Supplementary Catalogue of Arabic Printed Books in the British Library, 1958–1969* (4 vols., 1977).
10. British Museum. *A Catalogue of Persian Printed Books in the British Museum* (1922).

As computer technology and access improves, it is possible that such massive compilations will become obsolete. But until programmers devise adequate transliterations and record the mountain of existing bibliography, catalogs of this kind will remain an essential part of the scholar's repertory.

Chapter Two

THE SOURCES

AN ANALYTICAL SURVEY

ISLAMISTS like to complain about the state of their sources, but in fact what they have is extraordinarily rich and varied, far surpassing the miserable fragments which challenge the student of the late Roman Empire or early medieval Europe. The real problem is to use this patrimony effectively. To a large degree that is a matter of asking good questions, but good questions in turn depend on understanding the character of one's sources. The aim of this chapter, then, is to outline the materials at our disposal, and to suggest in general terms what kinds of questions these can and cannot answer. Ideally such a survey would be based on some rigorous and theoretically satisfying classification, and several historians have made valuable efforts in this direction. (An old but very good example is Ernst Bernheim, *Lehrbuch der historischen Methode* [5th–6th rev. ed., 1908], 255–259, 465–506.) In the end, however, I have found such classifications not rigorous but rigid, for any given system can reflect only one of many possible perspectives on the past. I have thus chosen to arrange my discussion simply according to the external features of the sources: written or non-written, paper or durable substances like metal and stone, literary or documentary in form. Whatever may be lost in theoretical sophistication will, I hope, be gained in clarity and flexibility.

A. NARRATIVE AND LITERARY TEXTS

Under this heading I include all those works which were written for general circulation among some broad and loosely defined group of interested persons, rather than composed as a direct instrument of business or administration. In the framework of this book, of course, the most important genre of such writings would be chronicles and biographical dictionaries. But this category includes many other things as well: administrative handbooks, anthologies of entertaining and edifying anecdotes, jurisprudence, lyric and satirical poetry, folklore, etc. It seems a very disparate lot, but material which has little to offer the student of politics may have much for a historian of social mores and values. In any case it is a grave error to exclude *a priori* any literary genre as a possible source of evidence whatever the nature of one's subject.

Obviously we cannot expect to achieve anything of value just by plunging into a pile of texts. On the most elementary level, it is essential to begin with

a survey of all the sources which may pertain to the problem under investigation, and to determine the relationships (borrowings, common sources, etc.) among them. Moreover, since the interpretation of any text depends on an understanding of its conceptual structure and rhetoric, we need to acquire a broad overview of the scientific-literary tradition within which it was composed.

The introductions to Arabic, Persian, and Turkish philology discussed above (p. 12) can be a useful beginning for such tasks, but serious work rests on a series of bio-bibliographic works which survey in detail the whole range of literary production in the classical Islamic languages. None of these is or could be wholly adequate: all are afflicted with an inevitable quota of gaps and errors, and all are on the road to obsolescence the moment they are published. Even so they are the indispensable foundation for research in Islamic studies, a historian's most constant companions.

The most famous of these is certainly Carl Brockelmann, *Geschichte der arabischen Litteratur* (abbr. *GAL*). This is in fact not a "history" at all, but an annotated repertory of Arabic manuscripts, arranged by author and organized in a generally chronological order. For each author we are given a capsule biography, a short list of references (both sources and studies) for his life, and a bibliography of his extant works comprising both manuscripts and printed editions. *GAL* has a complex publication history and thus can be somewhat confusing and cumbersome to use: 2 vols., 1898-1902; 3 supplementary volumes, 1937-42; revised edition of the original Vols. I-II, 1943-49. The three supplementary volumes did not in any way replace the original two, but only added new materials—authors, works, or additional manuscripts. For any topic, then, both the original and supplementary volumes must be consulted. By the time the supplementary volumes had been published, there was still more material to be included, but this time it was done through a thorough revision of the original two volumes. The revised Vols. I-II were of course repaginated, but the *original* page numbers of the 1898-1902 edition were retained in the margins, so as to facilitate use of the indices and cross-references in the supplementary volumes. In scholarly usage, citations are always made to the original pagination of Vols. I-II, although everyone is in fact referring to the data of the revised edition.

The author and title indices for the entire set are located in Supplementband III. The alphabetization for the authors' names differs somewhat from normal usage, but Brockelmann explains his rules clearly. Authors can normally be located both under their "common" names (al-Ṭabarī) and their given names (Muḥammad b. Jarīr). The title index unfortunately gives titles without reference to their authors and without indicating different works using the same name or variant titles (which are very common) for a single work.

Beyond such mechanical difficulties, there are problems inherent in *GAL*'s organization and approach. *GAL* only includes authors and works for which we have catalogued manuscripts. As a result, Brockelmann's survey is radi-

cally incomplete, especially for the earlier phases of Arabic literature (down to the 4th/10th century or so). Many writers (including some of great historical importance) are not listed at all, and for those who are we have only a partial conspectus of their *œuvre*. Nor can we let ourselves be misled by *GAL*'s organization, for each author is listed only once, under a single (albeit broadly defined) literary genre. This seems clear and simple enough, but it leads to numerous absurdities. Most authors cultivated several fields of learning, so that we constantly encounter cases like that of Ibn 'Unayn, a noted 7th/13th century satirical poet listed under *Geschichte* on the strength of a single misunderstood title. Brockelmann's achievement is an imposing one, but a naive user will get little benefit from it.

An ambitious and largely successful attempt to supplant *GAL* is Fuat Sezgin, *Geschichte des arabischen Schrifttums* (abbr. *GAS*; 9 vols., 1967—in progress). The volumes so far issued cover only the period down to 430/1040, and even within these limits such major genres as geography, philosophy, and *belles-lettres* remain to be dealt with. How many tomes will be required to complete this vast enterprise is almost beyond calculation; fourteen are projected for the first period alone:

1. *Qur'anwissenschaften, Hadīth, Geschichte, Fiqh, Dogmatik, Mystik* (1967)
2. *Poesie* (1975)
3. *Medizin-Pharmazie, Zoologie-Tierheilkunde* (1971)
4. *Alchimie-Chemie, Botanik-Agrikultur* (1971)
5. *Mathematik* (1974)
6. *Astronomie* (1978)
7. *Astrologie-Meteorologie und Verwandtes* (1979)
8. *Lexicographie* (1982)
9. *Grammatik* (1984)
- 10-11. *Literatur (Literaturgeschichte, Literaturtheorie, Erbauungsliteratur, Kunstprosa)* (in preparation)
12. *Physik-Technik, Geographie, Musik* (in preparation)
13. *Philosophie, Logik, Ethik, Politik* (in preparation)
14. *Einführung in die Geschichte der arabisch-islamischen Wissenschaften* (in preparation)

Although Sezgin is by no means immune to ambiguity and error, his work surpasses its predecessor in many areas. First, it is based on a much broader survey of Arabic manuscripts. Sezgin has benefitted from the energetic efforts of Muslim scholars in recent decades to record the holdings in their countries' libraries and to collect new manuscripts. (In the latter regard the Arab League's collection of photographed manuscripts from all over the Muslim world, including many private collections, is especially noteworthy.) To this he can add his own unrivalled knowledge of the immense holdings of Turkish libraries, not only those of Istanbul but of many provincial centers as well. His survey

is thus not only larger but far more representative than Brockelmann's. The scope of his efforts can be seen in the systematic repertory of libraries and manuscript collections given in Vol. I, and then again, thoroughly revised and updated, in Vol. VI.

Second, Sezgin's philological and historical commentary on each of the fields which he covers is much richer than Brockelmann's. His statements are at times controversial or overly self-assured, but they are significant all the same.

Finally, Sezgin's arrangement of his materials is for some purposes more rational than Brockelmann's, though it can be time-consuming to use. In Vol. I he sticks to Brockelmann's plan: each author, with all his extant writings, is listed once, under the heading of a single literary-scientific field. The later volumes, however, list each author separately within each of the fields which he cultivated. Thus, if we are interested in the medical writings of an author known also for philosophic and mathematical concerns, we can be reasonably confident of finding them in Vol. III. On the other hand, if we want to survey all the works of a given author or to define a broad intellectual tradition, the task is likely to prove profoundly frustrating.

Sezgin focuses on extant authors and works, and thus like Brockelmann he gives us only a partial survey of the Arabic literary universe. However, he also records writings which survive in substantial citations or are well attested by other authors; especially for the first two Islamic centuries, where so little has come down in its original form, this permits a far more adequate if sometimes more speculative picture than we had from *GAL*.

Several works can supplement *GAL* and *GAS*; of these we shall mention three.

1. 'Umar Riḍā Kaḥḥāla, *Mu'jam al-mu'allifin* (15 vols., 1957-61).

Kaḥḥāla gives capsule biographies (arranged in alphabetical order) of all authors, both medieval and modern, known to have written in Arabic, together with the titles of their major works. He lists no manuscripts but does give references to *GAL*. Though terse, his entries are based on a thorough knowledge of the Arabic biographical literature, including sources available only in manuscript.

2. Khayr al-Dīn al-Ziriklī, *al-A'lām* (1st ed., 1927-28; 2nd rev. ed., 11 vols. plus supplement, 1954-59; 3rd rev. ed., 8 vols., 1979).

A work similar to the preceding though more broadly focused, since it gives the lives of notable figures in Arab-Islamic history in general (including major Western Orientalists), not just writers. In Vols. 10-11, Ziriklī produces a great many facsimiles of autograph manuscripts, reader's certificates, etc. produced by the authors in his survey. Both Kaḥḥāla and Ziriklī include 20th-century figures.

3. Ḥajjī Khalīfa, *Kashf al-zunūn 'an asāmi al-kutub wa'l-funūn*: ed. and trans. by Gustav Flügel as *Lexicon Bibliographicum et Encyclopaedicum* (7 vols., 1835-1858); Arabic text ed. from the author's autograph by Şerefettin Yaltkaya and Kilişli Rifat Bilge (2 vols., 1941-43).

The manuscript collections of Istanbul have never been adequately surveyed and

catalogued, though important steps are now underway (see below, p. 38). For that reason this 11th/17th century compilation by an outstanding Ottoman scholar (on whom see "Kaṭib Çelebi," *EF*, iv, 760-762) is still a very useful bibliographic tool. Ḥajjī Khalīfa lists in alphabetical order some 14,500 titles of works available in the Istanbul libraries in his day, each one with a capsule description of its author and contents. In addition, he includes a series of discourses (also arranged in alphabetical order) on the various Islamic sciences. The *Kashf al-zunūn* has no shelf-marks or locations, but it does tell us whether manuscripts of a particular work might be found in Istanbul (some have been lost since the author's day, and many others added). More than that, because it is based on a direct survey of the manuscripts, it is very helpful in verifying the authors and titles mentioned in the medieval biographical dictionaries. A supplement to Ḥajjī Khalīfa, which draws largely on libraries founded after his death, was written around the beginning of this century: Bağdathī Ismā'īl Paşa, *İdārah al-maknūn fi al-dhayl 'alā kashf al-zunūn*, ed. Yaltkaya and Bilge (2 vols., 1945-47).

Impressive as these massive surveys are, they sometimes fail us, and then we must have recourse to the medieval Islamic biographical compilations. Here Paul Auchterlonie, *Arabic Biographical Dictionaries: a Summary Guide and Bibliography* (1987), can be helpful. Auchterlonie is very selective, but he is judicious and writes with the practical needs of librarians and researchers in mind.

Since the overwhelming majority of authors writing in Arabic were Muslims, it is natural that Brockelmann and Sezgin should focus on specifically Islamic sciences and literary genres. However, Arabic-speaking Christians composed a very considerable body of literature as well, and much of their work is of the highest importance for Islamic studies. It will suffice to mention the scientific translations from Greek and Syriac by the Nestorian Hunayn b. Ishāq, or the chronicles of the Melkite Yahyā al-Antākī and the Copt Sawīrūs b. al-Muqaffa'. Some of this material can be found in *GAL* and *GAS*, but the most thorough survey is Georg Graf, *Geschichte der christlichen arabischen Literatur* (5 vols., 1944-53).

A related body of material is covered in Anton Baumstark, *Geschichte der syrischen Literatur, mit Ausschluss der christlich-palästinensischen Texte* (1922, reprinted 1968). Syriac writing, with its focus on theology, liturgy, and the miraculous lives of the saints, may seem marginal to the normal concerns of the Islamic historian, but for certain topics it is very important indeed. Syriac chronicles, such as those by the pseudo-Dionysius of Tell Mahré (fl. ca. 800), Michael the Syrian (d. 1199), and Bar Hebraeus (d. 1286), often add vital material to the accounts of Muslim historians. Especially for the earliest Islamic centuries, valuable information and perspectives can be extracted from hagiography, sermons, etc. Baumstark is more an integrated literary history than the other bio-bibliographic works reviewed above, but in the notes he gives complete manuscript references.

In regard to the other "Christian" languages of the medieval Near East (Greek, Armenian, and at certain points even Latin), by far the most important reference is Gyula Moravcsik, *Byzantino-Turcica* (2 vols.; orig. ed., 1942-43; 2nd rev. ed., 1958), which throws light on many aspects of medieval Turkish history and culture. Vol. I surveys the Byzantine sources which touch on Turkish history, while Vol. II treats the Turkish linguistic data yielded by Byzantine texts. Of particular value in Vol. II is the extensive glossary of Turkish words and proper names which occur in the Greek texts.

Among the languages of medieval Islam, Persian is second in importance only to Arabic. Beginning in the 5th/11th century, Persian became the chief literary tongue not only of Iran proper but also of Anatolia, Transoxiana, and North India; it is thus an essential tool for any scholar studying the lands east of the Tigris River or north of the Taurus Mountains.

In this light, it is unfortunate that we still have no real equivalent for Brockelmann and Sezgin. A serious beginning in this direction was made by C. A. Storey, *Persian Literature: a Bio-Bibliographical Survey* (3 vols., 1927—in progress) but this remains an unfinished if impressive torso. As it stands it consists of the following parts:

- Vol. I, Part 1 (1927-39): Qur'anic Literature; History
- Vol. I, Part 2 (1953): Biography; Additions and Corrections
- Vol. II, Part 1 (1958): Mathematics; Weights and Measures; Astronomy and Astrology; Geography
- Vol. II, Part 2 (1971): Medicine
- Vol. II, Part 3 (1977): Encyclopaedias, Arts and Crafts, Science, Occult Arts
- Vol. III, Part 1 (1984): Lexicography, Grammar, Prosody and Poetics

The gaps here are all too evident, especially the lack of a volume on poetry, the proudest achievement of medieval Persian letters.

Some of the problems in Storey are addressed in the Russian translation and revision by Yuri Bregel, *Persidskaia literatura: bio-bibliograficheskii obzor* (3 vols., 1972). Bregel was able to draw on the vast and still only partially catalogued Persian manuscript holdings in the Soviet Union, and claims that his version contains twice as much material as the equivalent parts of the English edition. However, only the contents of Volume I, somewhat rearranged, were actually translated, though for most historians this is admittedly the most important section.

For Turkish literature we have only partial surveys. In the context of the present book this may not seem a crucial problem, since Turkish emerged as a major literary language (in both the Ottoman and Timurid lands) only towards the end of the 9th/15th century. Even so, the relatively few earlier works which do exist are very important, and a complete bio-bibliographic survey is clearly badly needed. For the time being, a solid assessment of the situation can be found in Eleazar Birnbaum, "Turkish Manuscripts: Cataloguing since

1960 and Manuscripts Still Uncatalogued," *JAOS*, ciii (1983), 413-420, 515-532, 691-708; civ (1984), 303-314, 465-504.

For our purposes the most useful reference is doubtless Franz Babinger, *Die Geschichtsschreiber der Osmanen und ihre Werke* (1927). So old a work is by definition obsolete, obviously, but the slow progress of Ottoman manuscript and historiographic studies means that it has retained much of its value. For other fields of Ottoman literature there is nothing similar, but useful information can be gotten from Bursalı Mehmet Tahir, *Osmanlı Müellifleri* (3 vols., 1333-42, in Ottoman script; new ed., 1970-75, in modern Turkish).

For Eastern Turkish (Chaghatay) writing, a major survey is now in progress: H. F. Hofman, *Turkish Literature, a Bio-Bibliographical Survey*. Section III: *Moslim Central Asian Turkish Literature*. Part I: *Authors*. (6 vols., 1969). As Hofman notes, this work is a kind of annotated index, arranged alphabetically, to the authors mentioned in M. F. Köprülü's study, "Çağatay Edebiyatı," *IA*, iii, 270-323. However, the current volumes omit the work of the most famous and influential writer in this dialect, 'Alī Shīr Nevā'i, proposing to deal with him separately.

A few bio-bibliographic surveys deal with particular fields, though not nearly as many as one might expect. As one example of these, which could stand as a model for others, see Ismail K. Poonawala, *Biobibliography of Ismaili Literature* (1977). Poonawala arranges his material according to the sects which made up the Ismā'īliyya, and then according to the authors within each sect. The known works of each, extant or not, are listed and concisely described. Anonymous works, which abound among the Ismā'īs, are given in a separate section. Poonawala includes all the relevant languages—not only Arabic and Persian, but Urdu and Gujarati as well. For any scholar dealing with Islamic religious history, and not just Ismā'īli specialists, this is obviously an invaluable resource, and definitively supplants the older surveys of Massignon (1922), H. F. Hamdani (1933), and W. Ivanow (1933, 1963).

All the bio-bibliographic surveys we have examined share a confusing and often frustrating point of usage. When they refer to manuscripts listed in printed catalogs, they give only the catalog numbers; these are usually *not* the shelflist or accession numbers used by the libraries holding these manuscripts. Since librarians cannot find a volume without its shelfmark, and since scholarly monographs and articles almost always identify texts by shelfmark as well, one must go to the printed catalogs to get this number. (Catalog references in the bio-bibliographic works should always be checked out in any case, since even the best of them are full of errors.) Thus, *GAL* may refer to a manuscript as "Rieu 465"—i.e., no. 465 in C. Rieu, *Supplement to the Catalogue of the Arabic Manuscripts in the British Museum* (1894). Under no. 465, along with an identification and description of the volume, its shelfmark is given—in this case "Or. 4215" (e.g., *Oriental Manuscripts*, no. 4215). The

usual reference in the scholarly literature would thus be "BM Or. 4215" (or since 1973, "BL" for British Library).

The bio-bibliographic works permit a reasonably efficient survey of our potential sources and a provisional selection of the texts to be examined. But they are of little help in the next stage, that of deciding which versions of these texts we will use. The great bulk of medieval Islamic book production is still in manuscript, and many printed editions are so poor that manuscripts must be consulted to establish reliable readings. In Islamic history, at least, textual criticism and palaeography are not a refuge for erudite drudges but an absolute requirement for effective research.

The study of medieval manuscripts should be founded on an exact knowledge of how books were made, distributed, and used. Though much remains to be done, we have an attractive and scholarly introduction to the subject in Johannes Pedersen, *The Arabic Book* (trans. Geoffrey French, 1984). This work was originally published in Danish in 1946, thus ensuring that most scholars could not use it when it was new, and by now substantial parts of it are of course obsolete. But Pedersen had a deep knowledge of Islamic religion and culture, and the notes and bibliography have been brought up to date in the translation. Altogether, this is still the best place to begin. Also very valuable, though more narrowly focused, is Franz Rosenthal, *The Technique and Approach of Muslim Scholarship* (1947), which analyzes the norms and practices which governed the copying of manuscripts.

Palaeography is obviously the one indispensable skill for the would-be reader of manuscripts. It is essential not so much because it enables one to decipher difficult scripts—some handwriting is beyond any science—but more importantly, because it provides criteria for estimating the age and provenance of undated and unsigned manuscripts.

For Arabic literary manuscripts there is unfortunately no real handbook of palaeography. For the scholar who simply needs to make out the text in front of him, however, the gap is not as crucial as it might seem. Literary manuscripts in Arabic, no matter where or when they were copied, are almost always written in some variant of a script called *naskhī*, which in principle at least is clear and precise. The major exceptions to this rule are two: (1) very early manuscripts, especially of the Qur'ān, are done in the much more difficult Kufic script; (2) the scribes of Andalus and North Africa evolved a very distinctive though easily learned Maghribi script which retains some archaic Kufic elements. In *naskhī* manuscripts, the main problems stem from the individual habits of the scribe—legibility and care, the use or neglect of vowels and diacritical points, etc. But no handbook is much help in equipping one to deal with personal idiosyncrasies of this kind; only experience and a solid knowledge of Arabic, such that one knows what words an author is using even when they cannot be deciphered, will turn the trick.

A good overview of the problems of Arabic palaeography is given by J. Sourdél-Thomine, "Khatt," *EF*², iv, 1113–1122. The best presentation of the

variety of hands which one can expect to encounter is probably Bernhard Moritz, *Arabic Palaeography: A Collection of Texts from the First Century of the Hijra till the Year 1000* (1905)—a munificently produced collection of plates in elephant folio format. Based almost entirely on the holdings of what was then the Khedivial Library in Cairo (now the Dār al-Kutub al-Miṣriyya), it contains 188 plates; there are however no transcriptions or notes. On a more modest scale are the following—also without transcriptions or annotation:

- a. A. J. Arberry, *The Chester Beatty Library: A Handlist of the Arabic Manuscripts* (6 vols., 1955–66). Plates of selected manuscripts in this truly remarkable collection at the end of each volume.
- b. A. J. Arberry, ed., *Specimens of Arabic and Persian Palaeography* (1939). Contains 48 examples, half in Arabic and half in Persian, from the India Office Library, London; almost all are 6th/12th century or later.
- c. Ṣalāḥ al-Dīn al-Munajjid, *al-Kitāb al-'arabī al-makṭūṭ ilā al-qam al-'āshir al-hijrī. Juz' 1, al-Namādhij* (1960). An excellent collection in folio size of examples from the Arab League's Institute of Manuscripts, but many of the plates seem faint or out of focus.
- d. Georges Vajda, *Album de paléographie arabe* (1958). Contains 94 plates drawn from manuscripts in the Bibliothèque Nationale, Paris, chosen expressly to illustrate the basic problems of Arabic palaeography. In general the most representative volume in this group, and save for the Chester Beatty catalogs the best produced.

A proposed summa by Adolf Grohmann, *Arabische Paläographie*, unfortunately remained unfinished at its author's death. Vol. I (1967) discusses writing materials, and Vol. II (1971), subtitled *Die Lapidarschrift*, deals essentially with Kufic letter-forms, which have only a limited significance for manuscripts.

Down to Timurid times at least, the scripts used in Persian and Turkish literary manuscripts are much the same as those used for Arabic. However, from the 10th/16th century, Persian and (to a lesser degree) Turkish scribes favored an elegant but often difficult hand called *nasta'liq*. A terse introduction to Perso-Turkish palaeography is Ali Alparslan, "Khatt," *EF*², iv, 1122–26, and examples of Persian script, mostly of Indian provenance, are given in Arberry, *Specimens*. The plates at the end of each volume in A. J. Arberry *et al.*, *The Chester Beatty Library. A Catalogue of the Persian Manuscripts and Miniatures* (3 vols., 1959–62), are very beautiful, but most of them focus on the illustrations of these manuscripts rather than the texts *per se*; Vol. I, dealing with the older items, has some important examples of Persian script, however.

The art of calligraphy, so highly esteemed among Muslims in modern as well as medieval times, really lies outside our concerns here. Even so, it can throw some light onto the criteria which governed ordinary scribal practice. A brief but attractive introduction to it is Annemarie Schimmel, *Islamic Calligraphy* (1970).

However correctly it may be read, a manuscript is not evidence for anything until its provenance, authenticity, and accuracy have been assessed. Since Islamists seldom enjoy the luxury of scientific critical editions, they have no choice but to learn the skills of textual criticism. An historian, unlike an editor or translator, is not called on to resolve every textual problem in the text before him, but he must be able to cope with any issue which substantively affects the questions he is pursuing. It is essential to know how to identify the significant manuscripts of a text, determine the affiliations among these manuscripts, choose among differing versions of the same passage, and emend a corrupt or unintelligible passage.

These skills, together with the principles underlying them, are discussed in many places. Sound general guidelines can be found in the classic European textbooks on historical method: E. Bernheim, *Lehrbuch der historischen Methode*, 330–464; and Ch. V. Langlois and Ch. Seignobos, *Introduction aux études historiques* (1898), 51–78; trans., G. G. Berry, *Introduction to the Study of History*, (1898), pp. 71–100. (The latter is certainly clear, but also far less nuanced and more dogmatic than Bernheim.) In addition, however, I would strongly urge two titles in Classical studies, which was the birthplace of textual criticism and is still the most sophisticated field in this regard. The most rigorous statement of method is Paul Maas, *Textkritik* (original ed., 1927; 4th rev. ed., 1960; English translation by Barbara Flower, *Textual Criticism*, 1958). An historical perspective is given by a solid and very approachable study of the transmission of Greek and Latin literature from Antiquity to early modern times: L. D. Reynolds and N. G. Wilson, *Scribes and Scholars* (1968). In a substantial appendix, the authors also present a perceptive critique of the underlying assumption of Maas' work—viz., that every manuscript tradition ultimately stems from a single authentic archetype.

The principles of textual criticism often emerge most vividly in the introductions to good scientific editions. We will glance at three particularly instructive examples. For the problems involved in confirming the authorship and assessing the contents of a single manuscript (a "unicum"), see Ibn 'Aqīl, *Kitāb al-funūn*, ed. by George Makdissi (Pt. I, 1970). A somewhat different case is represented by J. A. Bellamy's edition of Ibn Abī al-Dunyā, *Kitāb makārim al-akhlāq* (1973). Here the editor not only gives an astute and methodologically very conscious examination (based on a critical use of Maas) of the relationships between his two manuscripts and their hypothetical archetype, but also illuminates the transmission of a manuscript tradition in medieval Islamic culture. Finally, Franz Rosenthal's survey of the textual history of Ibn Khaldūn's *Muqaddima* (2nd. ed., 1967; Vol. I, pp. lxxxviii–cxxv) is a model for the study of a text transmitted by numerous manuscripts representing several different recensions.

Written texts, especially those with high religious value, were very often transmitted orally through a process of formal recitation and dictation. These

practices are discussed in their broad institutional context by George Makdissi, *The Rise of Colleges* (1981); see especially pp. 99–105, 140–146. Academic dictation is studied by Max Weisweiler, "Das Amt des Mustamili in der arabischen Wissenschaft," *Oriens*, iv (1951), 27–57. One element of this system was the "certificate of recitation" (*samā'*) inscribed on the title page of certain manuscripts; an important body of such certificates is analyzed by Georges Vajda in *Les certificats de lecture et de transmission dans les manuscrits arabes de la Bibliothèque Nationale de Paris* (1956). (They are not common, unfortunately; in a collection of some 7000 Arabic manuscripts, there are only seventy-two *samā'āt*.) The whole system was rooted in the effort to establish rigorous standards for the transmission of Prophetic hadith, and so it is useful to develop some acquaintance with this science. In addition to Sezgin's discussion in *GAZI* (see above, p. 22), see two medieval Islamic texts on method:

1. al-Ḥakīm al-Naisābūrī, *An Introduction to the Science of Tradition*, trans. James Robson (1953).
2. W. Marçais, "Le *Taqrīb* de en-Nawawī," *JA*, ser. 9: no. xvi (1900), 315–346; no. xvii (1901), 101–149, 193–232, 524–540; no. xviii (1901), 61–146.

Al-Ḥakīm al-Naisābūrī's treatment is extremely terse, but it is one of our earliest treatments on hadith methodology and is easy to follow. Al-Nawawī's work is an abridgement of the standard treatise on the subject, the *'Ulūm al-hadīth* of Ibn al-Ṣalāḥ al-Shahrazūrī (d. 643/1245).

Here we cannot deal in any systematic way with the problems of textual criticism, but a few general points which especially concern historians should be made.

In every case, the first step must be to establish the relationship between the manuscript we are using and the original work of which it claims to be a copy. Otherwise we cannot know if the statements before us are copyists' corruptions or even forgeries. Establishing the link between copy and original is no easy task: dated and signed colophons are rare, and authors' autographs or direct transmissions guaranteed by certificates of recitation are rarer still. To a large degree, one's judgment must be based on such elusive data as scripts, unusual errors shared by two or more manuscripts, etc.

Even in the case of a unicum with few external indications of date and provenance, however, we are not without resources. In the fields of history, biography, and jurisprudence in particular, medieval Muslim authors tended to absorb the work of their predecessors, either by direct quotation (not always attributed) or by extensive paraphrase. Thus the text of the vast chronicle of al-Ṭabarī (d. 310/923) often rests on a single manuscript, but the readings of these sections can be substantially confirmed by comparing them to Ibn al-Athīr (d. 630/1234), whose early volumes follow al-Ṭabarī very closely, albeit with some abridgement. Likewise, the one partial manuscript of 'Izz al-Dīn b.

Shaddād's life of Sultan Baybars can be checked and completed by a chronicle written half a century later by al-Yūnīnī, who appears to have cited the bulk of Ibn Shaddād almost verbatim. Obviously this technique will not yield a completely secure text; on the other hand, we get some compensation by learning how a given work was used and understood within the scholarly tradition of medieval Islam.

In the happy event that we have two or more manuscripts of the same text, there are other pitfalls. In particular, the temptation to harmonize the contents of different manuscripts must be strenuously avoided, for this is likely to blot out significantly different recensions of the work being studied. If, for example, Ms. A represents a rough but detailed draft version of a given chronicle and Ms. B a polished but somewhat abridged reworking of it, every effort must be made to preserve the differences between them. A particularly clear case of this kind is the *Mir'āt al-zamān fī ta'rīkh al-a'yān* of Sibṭ ibn al-Jawzī (d. 654/1256), one of the most important and influential chronicles of the 7th/13th century, which still awaits an adequate edition; see the review by Claude Cahen of a partial edition, *Arabica*, iv (1957), 191–194, and the same author's general remarks in "Editing Arabic Chronicles: a Few Suggestions," *Islamic Studies* (1962), 1–25; reprinted in *Peuples musulmans*, 11–36. A second example, this time drawn from jurisprudence, would be the *Muwāṭṭa'* of Mālik ibn Anas, whose complex textual history can be followed in *SEI*, 321f.; *GAS*, I, 458–460; and Ignaz Goldziher, *Muslim Studies*, (trans. S. M. Stern and C. R. Barber, 1967–71), II, 204–209. In short, the definitive "original text" is most often a chimera; better to focus one's energies on doing justice to all the data than to try to capture such an elusive beast.

In an ideal world, with time and expense no object, we would examine directly all known manuscripts of any text we intended to use, and would make our choice of variants and recensions according to the standards of a good critical edition. Obviously this is seldom feasible, and even microfilms (which are no substitute for the real thing) are often extremely difficult to obtain, especially from Eastern Europe and Asia. In such circumstances, we must turn to the printed catalogs and handlists produced by most of the world's major manuscript repositories. In addition to authors, titles, and shelflist numbers, these normally give such data as the number of pages or folios in each volume, its size, the number of lines per page, a description of the binding, and (if known) the date it was copied. A few catalogs go much further, giving quite detailed summaries of the contents of each manuscript, analyses of its date, provenance, and transmission, and even references to related manuscripts in other collections. The outstanding achievement in this field is no doubt the magnificent survey of the Islamic manuscripts of Berlin made late in the last century, so thorough and exact that it almost constitutes a history of the three literatures:

Wilhelm Ahlwardt, *Verzeichnis der arabischen Handschriften der königlichen Bibliothek zu Berlin* (10 vols., 1887–1899).

Wilhelm Pertsch, *Verzeichnis der persischen Handschriften der königlichen Bibliothek zu Berlin* (1888); *Verzeichnis der türkischen Handschriften der königlichen Bibliothek zu Berlin* (1889).

Catalogs of similar quality, though on a smaller scale, were prepared for several other European libraries at about the same time, but the 20th century has seen the near-demise of such efforts, doubtless due to their immense cost and limited audience. There are happily some important exceptions. West Germany has mounted a sustained project to survey the country's Oriental manuscript resources: *Verzeichnis der orientalischen Handschriften in Deutschland* (abbr., *VOHD*; 1961–in progress). The work has been divided into thirty-two volumes (many of them in several parts), one for each of the languages to be covered. In addition, a separately numbered series of supplementary volumes, dealing with specific problems or manuscripts, is also being issued; to date twenty-six of these have appeared. Within *VOHD* three volumes are of central interest for Islamic history:

B. XIII. *Türkische Handschriften*. 5 Teile (1968–81)

B. XIV. *Persische Handschriften*. 2 Teile (1968–80)

B. XVII. Reihe A. *Materialien zur arabischen Literaturgeschichte*. 2 Teile (1976–87)

B. XVII. Reihe B. *Arabische Handschriften*. 1 Teil (1976)

VOHD can be supplemented by Fuat Sezgin, *Beiträge zur Erschliessung der arabischen Handschriften in deutschen Bibliotheken* (3 vols., 1987), which assembles a useful (albeit antiquated) set of studies describing German manuscript collections of the mid and late 19th century. Vols. II and III reprint the old catalogs for Munich and Tübingen respectively; the articles in Vol. I focus on a number of personal libraries (by Landberg, Hartmann, Sprenger, et al.) which became the very heart of the great public collections in Berlin and elsewhere.

The vast majority of printed catalogs do not begin to approach German standards. Perhaps worst-served of all is Turkey, the country which possesses by far the richest Islamic manuscript holdings in the world. For the libraries of Istanbul, which contain at least 125,000 volumes, scholars have had to make do with a series of handlists (a separate one for each of forty or so institutions) published at the turn of the century. These are obsolete, laconic, and riddled with errors. For many other major centers, such as Konya or Bursa, we do not have even this much. In view of this situation, Fuat Sezgin has performed a real service with his recent anthology of articles describing selected manuscripts in Istanbul and other Turkish libraries: *Beiträge zur Erschliessung der arabischen Handschriften in Istanbul und Anatolien* (4 vols., 1986). Vol. IV is

an index to the manuscripts described in the first three, organized by library and shelflist number. The papers collected here were published between the late 19th century and 1961, and all are by German or Turkish scholars. There are unfortunate omissions—e.g., an important study of historical manuscripts in Istanbul by Claude Cahen, "Les chroniques arabes concernant la Syrie, l'Égypte, et la Mésopotamie de la conquête arabe à la conquête ottomane dans les bibliothèques d'Istanbul," *REI*, x (1936), 333–362. But Sezgin's initiative is a most useful one even so.

The situation has slowly begun to improve. F. E. Karatay, for example, did a competent set of catalogs for the Topkapı Sarayı Müzesi (7 vols., 1961–69), which for the first time made this great repository of some 12,000 manuscripts readily accessible to modern scholarship. The most crucial step, however, has been the decision of the Ministry of Culture in the mid-1970's to prepare a comprehensive union catalog of all the manuscripts in Turkey:

Türkiye Cumhuriyeti Kültür ve Turizm Bakanlığı, Kütüphaneler Genel Müdürlüğü. *Türkiye Yazmaları Toplu Kataloğu / The Union Catalogue of Manuscripts in Turkey* (11 vols., 1979—in progress; abbr., *TUYATOK*).

This immense campaign will inevitably stretch on for decades, and the initial volumes have tended to focus on small and hence relatively manageable collections. The entries are very terse, often without references to printed editions or the relevant bio-bibliographical sources. However, there are author and title indices for each collection, as well as full-page plates of selected manuscripts. And not least, the quality of the printing is quite high. The organization of the project is somewhat confusing. First, each volume is devoted to one or more of the collections in a given province (as defined by current boundaries). However, the provinces are not treated in sequences: Adana is covered in Vols. IX and XI, Istanbul (so far) in Vols. III and VIII. Second—in contrast to most European catalogs—*TUYATOK* deals with collections, not libraries per se. Thus, there will be no overall survey of the vast Süleymaniye Library in Istanbul; rather, each of the innumerable collections which make it up will be catalogued separately. For example, Vol. III is devoted to the collection of 425 mss assembled by Ali Nihat Tarlan, which happens to be housed at the Süleymaniye. In spite of such shortcomings, *TUYATOK* is an exciting venture and will surely have a profound impact.

A useful attempt to establish a union catalog of Persian manuscripts was undertaken by Ahmad Munzavī, *Fihrist-i Nuskahā-i Khafī-i Fārsī* (6 vols., 1348–51/1969–72), under the sponsorship of the Regional Cultural Institute in Tehran. Munzavī does not claim to add new materials, but simply abstracts the available printed catalogs; even so, these represent collections all over Europe, India, and the Middle East, and some 49,000 manuscripts are included.

We have already noted that articles dealing with selected manuscripts can help a scholar faced with non-existent or inadequate printed catalogs. In addi-

tion to the two anthologies by Sezgin for Germany and Turkey, most of the important ones down to the mid-1970's can be found in the thorough survey of manuscript collections in *GAS* VI, 311–466. A superbly produced new journal devoted specifically to Islamic manuscripts made its appearance in 1986: *Manuscripts of the Middle East* (abbr., *MME*)—a very welcome addition indeed. For current European-language contributions, *Index Islamicus* is the best reference, albeit a somewhat cumbersome one. In addition, such articles appear regularly in a number of Middle Eastern journals which the *Index* does not survey:

- a. *Majallat Ma'had al-Makḥūṭāt al-'Arabiyya* (abbr., *MMMA*; Arab League, Cairo; since 1982 published in Kuwait, with volumes numbered in a new series)
- b. *Mélanges de l'Institut Dominicain d'Études Orientales du Caire* (abbr., *MIDEO*)
- c. *Majallat Majma' al-Lughā al-'Arabiyya bi-Dimashq/Révue de l'Académie Arabe de Damas* (abbr., *RAAD*)
- d. *Majallat al-Majma' al-'Ilmī al-'Irāqī* (abbr., *MMI*; Baghdad)
- e. *Nashriyya-i Kitābkhāna-i Markazī-i Dānishgāh-i Tihārān dar barrā-i Nuskahā-i Khafī* (University of Tehran; abbr., *Nuskahā-i Khafī*)

The survey of Arabic manuscript collections in *GAS* VI has largely supplanted two older bibliographic works: A.J.W. Huisman, *Les manuscrits arabes dans le monde: une bibliographie des catalogues* (1967); and Georges Vajda, *Répertoire des catalogues et inventaires de manuscrits arabes* (1949). See also Kūrīs 'Awwād, *Fahāris al-makḥūṭāt al-'arabiyya fi al-'ālam. Catalogues of the Arabic Manuscripts in the World* (2 vols. 1405/1984). 'Awwād tries to be exhaustive, and provides brief evaluations of the catalogues he lists; in spite of numerous minor misprints, he is worth consulting. For Persian collections, in addition to Storey and Bregel, see the excellent though now obsolescent survey of Irāj Afshār, *Bibliographie des catalogues des manuscrits persans* (1337/1958). For Turkish we seem to have nothing of this kind, though *VOHD* has announced that a repertory by G. Hazai is in preparation (Suppl. XXII); in the meantime, see E. Birnbaum, "Turkish Manuscripts" (mentioned above, pp. 30–31). A broad overview, going far beyond the limits of Islamic studies, is provided by J. D. Pearson, *Oriental Manuscripts in Europe and North America: a Survey* (1971). Pearson briefly describes and assesses each of the collections which he includes, and though he has omitted Turkey he does discuss the Soviet Union. His comments on the USSR (still terra incognita for most scholars) can be supplemented by R. D. McClesney, "A Guide to Orientalist Research in Soviet Central Asia," *MESA Bull.*, xii, no. 1 (1978), 13–25. On the United States and Canada, finally, see Thomas J. Martin, *North American Collections of Islamic Manuscripts* (1977).

The conclusions to be drawn from this discussion are daunting: medieval Islamic manuscripts are likely to be full of errors, written in barely legible

scripts, and scattered in unlikely and inaccessible locations. That is all perfectly true; as historians we are clearly better off when we have our sources in a critical printed edition. But it is also true that manuscripts are alive in a way that printed texts can never be. Manuscripts put us in immediate contact with the men and women whom we study; through them we ourselves become participants in a living scholarly and literary tradition. For this privilege, mere inconvenience is a small price to pay.

B. ARCHIVES AND DOCUMENTS

In medieval Islamic history we are poor in archives but rich in documents. For the most part we have only begun to identify and study these, let alone integrate them into the main stream of historical research, which still depends overwhelmingly on narrative and literary sources. But documentary materials are quickly moving from the periphery to the center of historical thinking in the Islamic field, and a serious historian can no longer avoid the hard job of learning how to use them effectively. As a consequence, documents and the problems surrounding them will often claim our attention in the pages which follow, and in three chapters in Part II (7, 9, 11) we will explore certain groups of them in considerable detail. For this reason the present analysis will be a general one, in order to provide a broad context for more concrete discussions later on.

Medieval Islamic documents are very unevenly distributed in space and time. For Egypt alone do we have a nearly continuous (though extremely disparate) sequence of them, and the overwhelming majority of our total corpus in fact comes from that country. Other countries are represented only by tantalizing fragments; and precious as these are, they are no adequate foundation for the study of broad problems or periods. Only near the end of the time-span covered in this book—i.e., the later 8th/14th and 9th/15th centuries—does the quantity of documents even for the most favored regions (Anatolia, northwestern Iran, Syria-Palestine) begin to approach a critical mass.

Down to the 6th/12th century, all the extant documents are loose items—i.e., they are not part of an ordered archival collection, though in a very few cases it has been possible through extraordinary labors to reconstruct a partial archive from scattered pieces. Even when the documents come from large troves, as do most of the papyri or the Geniza papers, these are just miscellaneous aggregations of material which commonly originated literally as trash heaps. Between the 6th/12th and 9th/15th centuries, the few archival collections which exist are small and fragmentary, though there is a substantial improvement for the last decades of this period. The 10th/16th century, however, marks a revolution, for from this point on the vast resources of the Ottoman archives lie before us. The Ottoman documents mostly postdate the limits of this book, but even so we shall refer to them at many points, since they often

throw a direct light on the later phases of some problem we are discussing, provide a valuable comparative perspective, or suggest a useful set of questions and approaches.

Many documents have come down to us not in their original form, but through citations (of varying accuracy and completeness) in the narrative sources or through inclusion in collections of model documents. Such collections, usually called *majmūʿāt* or *munshāʾāt*, were compiled to provide chancery officials with formularies to guide them in the composition of elegant and formally correct state documents. Where possible the compilers would draw on actual documents registered in the state archives, and for this reason these *inshāʾ*-collections are potentially very important. There are pitfalls, however; compilers were not above inventing documents, and in any event it was common to omit such vital data as dates and personal names. Even in the most scrupulously made collection, important elements like seals, registration marks, etc., are inevitably absent. (On these matters see “*Inshāʾ*,” *EF*, iii, 1241–44.)

Documents, both official and private, were written on a variety of materials, but only three of these were widely used: papyrus, paper, and stone. The last of these of course pertains to inscriptions, which will be discussed under a separate heading. Papyrus (Ar., *qirṭās*), though produced only in Egypt, was used all over the ancient Mediterranean world down to early medieval times, and its import and sale was often a state monopoly. In Egypt, it continued to be used for both public and private business until the introduction of paper manufacture in that country in the early 5th/11th century. Since it was relatively cheap and common in Egypt, and since local soil conditions favored the survival of organic materials, it should be no surprise that almost all surviving papyrus documents have been discovered in that country, though Syria has also yielded a few pieces. As for paper (Ar., *kāghad*), it was introduced into Transoxania from China in the mid-2nd/8th century and was being manufactured in Baghdad some fifty years later. By the 5th/11th century it had become the principal writing material even in the conservative and relatively remote regions of Andalus and the Maghrib. The paper mills of medieval Islam produced an excellent product which remains strong and flexible for centuries, and so it is natural that paper documents form the bulk of what has come down to us. (On these topics see Grohmann, *Arabische Paläographie*, I, 66–117; “*Kāghad*,” *EF*, iv, 419–420; “*Qirṭās*,” *EF*, v, 173–174.)

The scripts used in Islamic documents can be most intimidating, to a far greater degree than literary manuscripts, their study demands careful palaeographic training. As to language, one must be prepared to confront extremes of style and usage: colloquial informality in private and business papers, almost impenetrably florid rhetoric in the chancery decrees and correspondence of later centuries. For at least some of these problems, fortunately, a number of useful titles are available.

Since the papyri represent the earliest body of Islamic documents (both

official and private), we can begin with a handbook by Adolf Grohmann, *From the World of Arabic Papyri* (1952). This work was meant as an elementary introduction to the subject. Even so, it has useful chapters on script and language. It contains also a number of printed and translated sample documents, but the few accompanying facsimiles are unfortunately too poorly printed to be of much value. The author's statements on script and language are more fully developed in his *Einführung und Chrestomathie zur arabischen Papyriuskunde* (1955), but this important study contains no texts at all. On the grammar of the papyri, which departs in significant and sometimes confusing ways from the norms of Classical Arabic, see the excellent analysis by Simon Hopkins, *Studies in the Grammar of Early Arabic, Based upon Papyri Datable to before A.H. 300/A.D. 912* (1984). Given the lack of a comprehensive handbook, the best recourse is probably to study papyri which have been published with good facsimiles, printed transcriptions, translations, and thorough annotation. For state documents, a good example would be Nabia Abbott, *The Qurrah Papyri from Aphroditto in the Oriental Institute* (1938). An important archive of private documents has recently been reconstructed by Yūsuf Rāghib, *Marchands d'étoffes du Fayyūm au III^e/IX^e siècle d'après leurs archives (actes et lettres); I, Les actes des Banū 'Abd al-Mu' min* (1982). (Six fascicles altogether are projected in this series.) The largest published collection of papyri is still Adolf Grohmann, *Arabic Papyri in the Egyptian Museum* (6 vols., 1934–62); through it one can get a good idea of the sort of linguistic and palaeographic problems likely to occur in any of these documents. The skills required to handle papyri are precisely the same as those needed for paper documents, at least those of non-governmental provenance; papyrology is a science to be acquired by anyone who has to handle loose documents dug from the ground, often in tattered condition and written in illegible and ungrammatical prose.

Perhaps because so few original state documents in Arabic still survive, we have no full-length modern account of the chancery scripts used in these texts. Most of what is known is presented in the meticulous study of S. M. Stern, *Fatimid Decrees* (1964), which has small but clearly printed facsimiles of seven items from 6th/12th century Egypt. As his title implies, Stern deals only with documents from the caliphal chancery, and does not address the very different scripts and formats used in such quasi-official texts as deeds of *waqf* or minutes of judicial hearings.

In regard to Persian state documents we are somewhat better off. First of all, here we do have a general handbook: Lajos Fekete, *Einführung in die persische Paläographie: 101 persische Dokumente*, ed. G. Hazai (1977). This is an anthology of documents drawn up in chanceries throughout Iran, Anatolia, and Transoxiana between 1396 and 1702. Each piece is given in facsimile, printed transcription, and German translation, and there is also a lengthy introduction which discusses scripts, the format and structure of the documents, diction and rhetoric, etc. Unfortunately this book must be used with caution; the facsimiles

are often hard to make out, and more important, it contains many significant errors of transcription and translation. A more reliable and convenient introduction to the arcana of Persian palaeography and diplomatics can be gotten from the fine study of Heribert Busse, *Untersuchungen zum islamischen Kanzleiwesen, an hand Türkmenischer und Safawidischer Urkunden* (1959). Busse's scale and approach rather resemble Stern's; he studies twenty-three documents dating from 1453 to 1717.

As already noted, the Ottoman archives contain materials of extraordinary importance even for periods before the 10th/16th century, not only for the Mediterranean Basin but for Iran as well. This material is often extremely difficult to use, but by now a considerable technical literature has been generated; this is ably reviewed in Valery Stojanow, *Die Entstehung und Entwicklung der osmanisch-türkischen Paläographie und Diplomatik* (1983). A practical orientation to the decipherment of Ottoman state documents can be found in J. Reyichman and A. Zajackowski, *Handbook of Ottoman-Turkish Diplomatics*, trans. A. S. Ehrenkreutz (1968). The chapter on palaeography is broadly applicable to Persian chancery usage as well, though of course there are significant differences in technical terminology, names of scripts, etc. The forbidding script used by the Ottoman financial bureaucracy is presented in Lajos Fekete, *Die Siyaqat-Schrift in der türkischen Finanzverwaltung* (1955), an important work which is far more satisfactory than the same author's *Einführung* discussed above.

Language and script are not the only problems which confront us. No less important is reconstructing the context of institutions and procedures within which these documents were produced, for without such a context they are meaningless and unintelligible. The relevant context will of course vary greatly according to the kind of document in question. Many items—business papers, minutes of court proceedings, deeds of *waqf*—call for a solid grounding in practical jurisprudence (*fiqh al-fiqh*) and judicial procedure. (For further discussion of these issues, see Part II, Ch. 9.) State documents, in contrast, require an exact knowledge of the chanceries and finance bureaux of medieval Islam. These are in many cases still only poorly understood, however; not only were they complex organizations in themselves, but they varied greatly from one region and period to another. In recent decades, fortunately, a considerable number both modern studies and sources written by members of the Islamic bureaucracies have been published. These do not solve all difficulties, obviously, but they give us a working vocabulary and suggest some possible lines of analysis. In the following paragraphs, we will review briefly the basic texts and studies for several periods of Islamic history. A far more detailed examination for one polity (the Mamluk Empire in Egypt and Syria) will be presented in Part II, Ch. 7.

We begin, naturally enough, with a series of articles in *EI²*: "Diplomatic," ii, 301–316 (an overview of documents and how they were produced); "Daftar,"

ii, 77–81 (the file or register prepared by the finance bureaux); “Dīwān,” ii, 323–337 (originally the muster-roll of soldiers entitled to stipends, but generally the term for a bureau or department); “Farmān,” ii, 803–805 (the royal decree); “Kātib,” iv, 754–760 (the official or secretary); “Khātam,” iv, 1102–1105. In *El* certain articles are still of value: e.g., “Tuḡhrā,” iv, 822–826 (the royal signature in Turkish dynasties).

The roots of Islamic diplomatics and administration obviously lie in the usage of the Early and Marwanid Caliphates, but our knowledge of the institutions and procedures of these regimes remains uncertain. Under such circumstances, the best strategy is to begin with a few recent monographs and work back into the sources and studies cited by them. Early Islamic Egypt is by far the best-documented province, though the documents are hardly transparent. (A warning is in order here: Egypt is typical only of Egypt, and the urge to generalize must be staunchly resisted.) The most recent analysis is Kisei Morimoto, *The Fiscal Administration of Egypt in the Early Islamic Period* (1981), to be compared with the astute though polemical account of D. C. Dennett, *Conversion and the Poll Tax in Early Islam* (1950), pp. 3–13, 65–115. The forms used in the official papyri are treated in Grohmann, *Einführung*, pp. 107–130. For the crucial and innovative region of Iraq, a mass of data on every aspect of administration has been sifted from an impressive array of sources by M. G. Morony, *Iraq after the Muslim Conquest* (1984), pp. 27–164, although his general conclusions may need further study. On the origins and character of the fiscal system in this region, Dennett is again incisive though far from definitive.

The Abbasid dynasty has a special role in the development of Islamic government, not only because of its early grandeur, but even more because of its immense prestige, which made it a model of bureaucratic organization and administrative procedure for so many successor states in the Nile-to-Oxus region. In addition, the growing elaboration and self-consciousness of the bureaucracy led to the composition of numerous treatises on taxation, the art of the secretary, etc. The chancery and fiscal practices of the Abbasids and their early Iranian successors are summarized in the chapter on *kitāba* in al-Khwārizmī's *Mafātīḥ al-ʿulūm*, ed. G. van Vloten (4 vols., 1895; repr. 1968); this text is most conveniently studied through an extensively annotated translation by C. E. Bosworth, “Abū ʿAbdallāh al-Khwārizmī on the Technical Terms of the Secretary's Art,” *JESHO*, xii (1969), 113–164. The general structure of Abbasid administration is traced in the formidable study of Dominique Sourdel, *Le vizirat abbaside de 749 à 936* (2 vols., 1959–60). Sourdel's work is exhaustively documented, but its real merit lies in its focus on the problem of change in the functions and political power of the *wazīrs*. The Egyptian papyri are still numerous in this period; their data is analyzed in the relevant chapter of Morimoto.

Since post-Abbasid Egypt and Syria are treated in considerable detail later on, it will be enough here to refer to a few works which between them sum up

or give access to everything else. By far the most important literary source is the imposing summa of al-Qalqashandī, *Ṣubḥ al-ʿā shā fi šināʾ al-ʿinshāʾ* (14 vols., 1913–20; repr. 1964). The bulk of this vast compilation makes it difficult to approach, but it is summarized in Walther Björkman, *Beiträge zur Geschichte der Staatskanzlei im islamischen Ägypten* (1928). On chancery procedures, the crucial study is Stern's *Fatimid Decrees*. Finally, Hassanein Rabie, *The Financial Administration of Egypt, A.H. 564–741/A.D. 1169–1341* (1972) provides a wealth of data on his subject, though his interpretation of his material seems incompletely worked out and in any case is difficult to follow.

The 5th/11th century opens a new era in the evolution of Iranian administrative practice, for it is from this time that a separate and distinctive Persian-language chancery tradition begins to emerge. Although the Iranian chanceries have bequeathed us no comprehensive works like that of al-Qalqashandī, we do have a number of extremely valuable specialized treatises. On financial procedures, see ʿAbdallāh b. Muḥammad b. Kiyā Māzandarānī, *Risāla-i falakiyya dar ʿilm-i siyāqat*, ed. Walther Hinz (1952), the bulk of which consists of models of the various kinds of financial registers in use in the author's time (8th/14th cen.). This treatise has been analyzed by Hinz in a separate study: “Das Rechnungswesen orientalischer Reichsfinanzämter in Mittelalter,” *Islam*, xxix (1950), 1–29, 113–141. From the end of the 11th/17th century we have an anonymous work entitled *Tadhkirat al-mulūk*, ed. and trans. V. Minorsky (1943), which gives a critical account of the administrative institutions of the decaying Safavid regime. In spite of the late date of this work, the editor's introduction and notes make it a significant resource even for far earlier periods. In Persian, see the general work of Jahāngīr Qāʾim-maqāmī, *Muqaddima-i bar shinakht-i asnād-i tārikhi* (1350/1971).

Among modern studies of Iranian diplomatics, a sound general survey is given by H. Busse, “Persische Diplomatie in Überblick: Ergebnisse und Probleme,” *Islam*, xxxvii (1961), 202–245, which can be studied in conjunction with the same scholar's *Untersuchungen zum islamischen Kanzleiwesen* (see above, p. 43). For the formative period of the Iranian tradition (5th/11th–7th/13th centuries) we have no extant documents in their original form, but must depend on the *inshāʾ*-collections. Several of these are studied in Heribert Horst, *Die Staatsverwaltung der Grosselgügen und Ḥorazmšāhs (1038–1231)* (1964). Horst's conception of administration is rather static and mechanical, and there are numerous errors in his summary translations from the documents, but he provides a useful orientation to the subject.

For the periods covered in this book, North Africa seems to have left us neither original documents nor systematic treatises on administration. Under the circumstances, we can probably do no better than to examine the relevant chapters in Ibn Khaldūn's *Muqaddima* (trans. Franz Rosenthal, Vol. II, pp. 3–48). As in the eastern Islamic lands, of course, numerous documents are transcribed (but how reliably?) in the chronicles, biographical dictionaries, and *majmūʿāt*.

It would be extremely useful to have accurate and complete calendars of Islamic documents, organized by period, region, and subject—the sort of thing that students in English history, for example, simply take for granted. But it will be a very long time before our field can achieve anything like this, and in the meantime historians of Islam will have to count on expending much time and effort just to determine what documents may be available. However, we do have a few reference tools, survey articles, and printed collections, and we will conclude this section by identifying the most important of these, insofar as they deal with original documents and not transcriptions in literary texts and *majmūʿāt*.

Certain European archives contain a number of Arabic documents—treaties, diplomatic correspondence, etc. Among these the most important published collections are the following:

- a. M. A. Alarcón y Santón and R. G. de Linares, *Los documentos árabes diplomáticos del archivo de la Corona de Aragón* (1940)—162 documents, dealing with Granada, North Africa, and Egypt.
- b. Michele Amari, *I diplomi arabi del R. Archivio Fiorentino* (1863).
- c. Salvatore Cusa, *I diplomi greci ed arabi di Sicilia* (2 vols., 1868–1882)—mostly items from the Norman period.

Documents of a very different kind—marriage contracts, personal letters, household inventories—are presented in the meticulous collection of Wilhelm Hoernerbach, *Spanisch-Islamische Urkunden aus der Zeit der Nasriden und Moriscos* (1965).

The volume of published documents from Egypt is far too large for any adequate survey here. Unfortunately these publications are terribly scattered, and to date there is no general index for them. Under these circumstances, we shall restrict ourselves to identifying the most important groups of documents, together with those studies and surveys which best give access to them.

To the papyri we have already devoted considerable attention. An exhaustive inventory of find-sites, museum and library collections, and publications is given in Grohmann, *Einführung*, to be updated by the same author's *Arabisches Papyruskunde*, HO, Ergbd. II, 1 (1966). A body of materials rather similar in character and provenance to the papyri, though later in date, are the so-called "Vienna papers"—many thousands of loose scraps of paper stored in uncatalogued boxes at the Österreichische Staatsbibliothek. Of these there is a brief but concrete description in H. Rabie, *The Financial System of Egypt*, pp. 3–6. (Much of the Vienna material is available on microfilm at a rather surprising location, the Hill Monastic Library of St. John's University, Collegeville, Minnesota.) New troves of documents are always being uncovered. For example, excavations during 1978 at the Red Sea port of Qusayr revealed some 400 letters, bills of lading, etc., deposited by merchants residing there during Mamluk times.

No doubt the most remarkable corpus of documents from Egypt are the Geniza papers—a vast tumble of writings of all kinds discovered in a sealed storeroom of the Fusṭāt synagogue during renovations to that building in 1890. These will be discussed more fully in Part II, Ch. 11; here we need only note that the Geniza has yielded some 10,000 documents, dating from the late 4th/10th to the 9th/15th centuries. This hoard was broken up early on, so that Geniza materials are now scattered among collections all over Europe and Asia. The best introduction to this material and its extraordinary importance for Islamic and Mediterranean history is S. D. Goitein, *A Mediterranean Society: the Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza* (5 vols., 1967–88); for a description of the Geniza finds see Vol. I, 1–28. Geniza publications and studies are voluminous; down to 1964 they have been recorded by Shaul Shaked, *A Tentative Bibliography of Geniza Documents* (1964), which remains useful in spite of the flood of new work over the past two decades. The first part gives a comprehensive list of Geniza texts, arranged according to the collections where they are now housed; the second part presents a bibliography of publications and studies.

Very few Egyptian state documents (decrees, official correspondence, cadastral surveys, etc.) from before the Ottoman conquest have come down to us. However, the archives do preserve nearly 900 deeds of *waqf*, contracts of sale, etc., drawn up on behalf of the sultan and other high officials. These have now been catalogued (with facsimiles and printed transcriptions of nine sample documents) by Muḥammad Amin, *Catalogue des documents d'archives du Caire, de 239/853 à 922/1516* (1981, in Arabic)—a work which will surely have a strong impact on the study of social and economic life during the Mamluk period.

The only substantial series of chancery documents still extant is located at St. Catherine's Monastery on Mt. Sinai. These are available on microfilm at the Library of Congress, Washington, D.C., and have been catalogued (albeit in a very terse manner) by A. S. Atiya, *The Arabic Manuscripts of Mt. Sinai* (1955). Most of those relevant to our period have been published—the Fatimid and Ayyubid documents by S. M. Stern, the Mamluk items by Hans Ernst, *Die mamlukischen Sultansurkunden des Sinai-Klosters* (1960). An overview of this field is given by H. R. Roemer, "Arabische Herrscherurkunden aus Ägypten," *OLZ*, lxi (1966), 325–347.

In contrast to Egypt, the lands of the Fertile Crescent have pathetically few documents to offer; the bulk of these come from Jerusalem and Damascus. There are a few 3rd/9th century papyri published by Nabia Abbott, "Arabic Papyri of the Reign of ʿĀḍ al-Mutawakkil 'alā-llāh," *ZDMG*, xcii (1938), 88–135. In Istanbul, the Museum of Turkish and Islamic Art houses some remarkable fragments brought there from the Umayyad Mosque of Damascus after that building was gutted by a disastrous fire in 1893. These are described by J. Sourdel-Thomine and D. Sourdel in two articles: "Nouveaux documents

sur l'histoire religieuse et sociale de Damas au Moyen Âge," *REI*, xxii (1964), 1–25; À propos des documents de la grande mosquée de Damas conservés à Istanbul. Résultats de la seconde enquête," *REI*, xxiii (1965), 73–85. Three of the oldest items were published by the Sourdels in "Trois actes de vente damascains du début du iv^e/x^e siècle," *JESHO*, viii (1965), 164–185. Finally, we should mention an archival collection which is in some respects comparable to that of St. Catherine's, though on a markedly smaller scale. This is the body of documents held at the Franciscan Custodia Terrae Sanctae in Jerusalem. A series of royal decrees running from al-Ashraf Sha'ban (764–778/1363–1376) to Khushqadam (865–872/1461–1467) were published in N. Risciani, *Documenti e firmani* (1931), and a summary catalog was provided by E. Castellani, *Catalogo dei firmani e altri documenti legali conservati nell'archivio della Custodia in Gerusalemme* (1922). Neither publication was ever put into general distribution, however, and both are almost impossible to find.

Far more important than any of the above collections is a trove of some 1000 documents of every kind—decrees and petitions, household inventories, acts of sale, etc.—from the Haram al-Sharif in Jerusalem, dating from the 7th/13th to the late 9th/15th centuries, with the great majority belonging to the 790s/1390s. These were first described by Linda S. Northrup and Amal Abul-Hajj, "A Collection of Medieval Arabic Documents in the Islamic Museum at the Haram al-Sharif," *Arabica*, xxv (1978), 282–291; see also Donald P. Little, "The Significance of the Haram Documents for the Study of Medieval Islamic History," *Islam*, lvii (1980), 189–219. Little has published a detailed catalogue of this material, *A Catalogue of the Islamic Documents from al-Haram as-Sarif in Jerusalem* (1984). The documents are grouped according to their legal function (e.g., decrees, estate inventories, contracts), and an English abstract of each item is presented. There are regrettably no facsimiles or Arabic texts. Some of Little's readings have been criticized. (See for example the review by D. S. Richards in *BSOAS*, l [1987], 362–364.) However, the script of these documents is almost impenetrable in places, and whatever its flaws, Little's catalog is an invaluable resource for the student of Mamluk Syria. The few studies of the Haram documents already published are enough to demonstrate their profound importance, especially if they can be used in conjunction with the Egyptian materials catalogued by Amin.

If only because of the bureaucratic needs and traditions of the Ottoman state, we might expect to find quite a number of Anatolian documents dating from the 7th/13th to the 9th/15th centuries. In fact such items seem to be rather sparse, though a careful survey of the provincial *shari'a*-court records might still turn up a great deal. In the meantime, see the bibliographical essay in Claude Cahen, *Pre-Ottoman Turkey* (1968), especially pp. 434–35. Documents belonging to the very end of our period are presented in Mehmet Şefik Keçik, *Briefe und Urkunden aus der Kanzlei Uzun-Hasans: ein Beitrag zur Geschichte Ost-Anatoliens im 15. Jahrhundert* (1975).

Iran is well served by a recent publication: Bert G. Fragner, *Repertorium persischer Herrscherurkunden: publizierte Originalurkunden (bis 1848)* (1980), which gives bibliographic data on 868 documents, the earliest dating from ca. 1200. Fragner includes only royal chancery documents, to be sure, and does not directly address unpublished materials. What may yet be found is suggested by a body of documents discovered in 1970 at the Safavid shrine in Ardebil. This collection numbers more than 500 items, dating from the 6th/12th to the 9th/15th century. It was first described by Gottfried Hermann, "Urkunden-funde in Azarbaygân, AML, NF iv (1971), 250–262; see also the comments by Fragner, "Das Ardabiler Heiligtum in den Urkunden," *WZKM*, lxxvii (1975), 171ff. Twenty-five of the earliest judicial and notarial documents of this group have been published and translated (with a detailed legal commentary) by Monika Gronke, *Arabische und persische Privaturkunden des 12. und 13. Jahrhunderts aus Ardabil (Aserbaidschan)* (1982).

The discovery and classification of documents will be urgent tasks for a very long time to come. Even as things stand, however, historians of Islamic society can begin to progress from collection and technical analysis towards the integration of documentary evidence into the mainstream of historical inquiry.

C. NUMISMATICS AND METROLOGY

The Arab Conquests irrupted into two highly monetized economies—the Roman-Byzantine and the Sassanian—and from the outset the new rulers attempted to integrate the established monetary systems into their own emerging fiscal and economic framework. In this effort they succeeded, and one of the salient features of Islamic history, in almost every period and region, is the primary role of coined metal (gold, silver, and copper) within its several monetary systems. Thus coins will inevitably have a large part to play in our efforts to reconstruct the political, social, and economic life of medieval Islam. Every coin is a direct and authentic reflection of the political and economic system which produced it; it is therefore perfect evidence for that system if only we can learn how to decode it.

To achieve this is of course no easy matter; even the finest numismatists will often find that the full significance of a coin escapes them. Even so, any competent Islamic historian must become familiar with the many ways in which coins can be both evaluated as objects in themselves and used to illuminate broader historical concerns. A good introduction to the special concerns and skills of numismatists will be found in the handbook of Philip Grierson, *Numismatics*, (1975). Grierson is certainly not oblivious to "Oriental" coinage; since he focuses on Classical and medieval European issues, however, some of what he says can be applied to the Islamic world only with reservations. A book more specifically concerned with method and technique is that of J. M.

Dentzer, P. Gauthier, and T. Hackens, eds., *Numismatique antique: problèmes et méthodes (Annales de l'Est, mémoire 44; 1975)*.

Unfortunately no guide to numismatic method specifically addresses medieval Islam. This gap can be partly remedied, however, through an important series of articles by Michael L. Bates, "Islamic Numismatics," *MESA Bull.*, xii, no. 2 (May 1978), 1–16; xii, no. 3 (Dec. 1978), 2–18; xiii, no. 1 (July 1979), 3–21; xiii, no. 2 (Dec. 1979), 1–9. In a remarkably thorough and lucid manner, Bates surveys reference tools, collections and research facilities, the main problems of method and research in the Islamic field, and the major studies relating to specific periods, regions, and dynasties. His account permits us to restrict our attention here to a few basic or representative works.

A sound overview of Islamic coinage can be found in Stephen Album, ed., *Marsden's Numismata Orientalia Illustrata* (1977). This work reviews, dynasty by dynasty, all the major coin types issued by Islamic mints down to late Ottoman times. It is illustrated not by photographs but by line drawings, most of which are of excellent quality. It also has a concisely annotated bibliography giving the more important references to the numismatic literature for each dynasty. Album intended his book primarily for dealers and collectors, but it is a good place to start when one needs to identify a book or to compare it to other issues.

Far more systematic surveys will be found in two of the major museum catalogs:

Stanley Lane-Poole, *Catalogue of the Oriental Coins in the British Museum* (10 vols., 1875–1890).

Henri Lavoix, *Catalogue des monnaies musulmanes de la Bibliothèque Nationale* (3 vols., 1887–1891).

The post-Conquest and Umayyad issues in the British Museum were re-catalogued in two masterful volumes by John Walker, *A Catalogue of the Muhammadan Coins in the British Museum* (Vol. I: *Arab-Sassanian Coins*, 1941; Vol. II: *Arab-Byzantine and Post-reform Umayyad Coins*, 1956). In Paris, Gilles Hennequin has taken up the unfinished work of Lavoix. Three volumes are projected, of which one has recently appeared: Vol. V, *Asie pré-mongole, les Salgûqs et leurs successeurs* (1985)—a massive compilation covering 2000 coins from thirty-five dynasties. Between these two great surveys, almost every type of coin issued by any Muslim dynasty is represented somewhere. Of course both Lane-Poole and Lavoix are seriously antiquated, and neither gives modern numismatists all the information they may seek, but there will be nothing to replace them in the foreseeable future.

A project which is both more limited and in some ways more useful than redoing comprehensive museum catalogs is the preparation of detailed dynastic surveys which bring together coins from many different collections. This approach permits a far more systematic view of all the coin-types produced

within a given period and region than we can obtain from the holdings of a single museum. On the other hand, it can be cumbersome to compare the issues of different states, or to discern how a given coinage type evolved over a long period of time. Moreover, such dynastic surveys are extremely time-consuming and expensive to prepare, and because they require the cooperation of many institutions and collectors they are sometimes not feasible at all. In spite of such difficulties and shortcomings a few really outstanding dynastic surveys have been done. See for example two works by Paul Balog: (1) *The Coinage of the Mamluk Sultans of Egypt and Syria* (1964); (2) *The Coinage of the Ayyubids* (1980).

Islamic coins are usually (but not always) aniconographic—i.e., they bear no images. Instead, they are inscribed with a variety of names and phrases. Typically, a gold or silver coin will carry (1) the name and titles of the issuing ruler, (2) the name of the mint-city where it was issued, (3) the date of issue, (4) some religious legend, most commonly the *shahâda*. Since these words are often only half-legible at best, the assistance of several reference works may be needed to decipher them.

The most valuable of these (though it contains numerous errors and omissions) is doubtless Eduard von Zambaur, *Die Münzprägungen des Islams, zeitlich und örtlich geordnet*, ed. Peter Jaekel (1968). This is an alphabetically arranged repertory of all the mint-cities of medieval Islam west of India. Each mint-city is briefly identified, then keyed to an extensive bibliography of sources and to all the published coins (arranged by dynasty and date of issue) which come from that place. We can thus identify any mint-city which we are likely to encounter, and in addition almost any coin can be placed within the context of other issues from the same place or time. To Zambaur's basic work the editor (Jaekel) has added a valuable cross-reference by creating twenty-six tables which classify all known coins by date. There is no separate listing by dynasty (which is in fact the most common classification system in Islamic numismatics), but this is easy enough to establish for any given case from the data given here.

To confirm the names and titles of the issuing rulers, we can go to Zambaur's *Manuel de généalogie et de chronologie* and other reference works of the same kind (see above, pp. 20–21). For titles and honorifics only, there is a very helpful compilation by Hasan al-Bāshā, *al-Alqāb al-Islāmiyya fi al-tārīkh wa'l-wathā'iq wa'l-āthār* (1957), a work which is well documented from Arabic (but not Persian or Turkish) sources, such as inscriptions, chronicles and biographical dictionaries, and al-Qalqashandī's *Ṣubḥ al-ā' shā*. For each term the author presents both its literal meaning and its usage in formal protocol.

Religious legends and pious exclamations may have real political and ideological significance. For such expressions, the otherwise antiquated work of O. Codrington, *A Manual of Muslim Numismatics* (1904), contains a chapter which is still helpful.

As for dates, if they cannot be read then we are out of luck. To some degree a coin can be dated by its stylistic characteristics (script, ornament, etc.) but that is obviously a dangerous expedient.

Metrology is a crucial aspect of numismatic analysis and interpretation. Most of what we know in this field is summed up in two major references. The older is a classic compilation by Henri Sauvage, "Matériaux pour servir à l'histoire de la numismatique et de la métrologie musulmanes," strewn throughout various issues of the *Journal Asiatique* published between 1879 and 1887. (For a detailed outline see the Bibliographic Index.) It is divided into four parts, dealing respectively with coinage, weights, volumes, and lengths. Within each part, Sauvage lists all the terms used in the Islamic world to represent units of value, weight, etc.; under each term, he then cites in translation all the texts available to him which explain or illustrate it. In the final installment of the series (entitled "Complément"), he constructs price tables for the basic necessities of life, arranged by region and date, and a chronologically ordered price table for miscellaneous items which comes down to 1051 A.H. In the section on weights, he attempts to convert them to metric values, but this is best ignored. In spite of its age and confusing organization, it remains an invaluable contribution.

A second reference is much more compact, more reliable in its metric conversions, and easier to use: Walther Hinz, *Islamische Masse und Gewichte, umgerechnet ins metrische System*, (HO, Ergbd. 1, 1955; 2nd rev. ed., 1970). At the same time, it is not so rich a resource as Sauvage, and where possible it is useful to consult the two works together.

In the crucial area of bibliography Islamic numismatics is quite well off. For contributions down to 1950 we have the exhaustive survey of L. A. Mayer, *Bibliography of Moslem Numismatics, India Excepted* (1954). Since 1947, the American Numismatic Society has published a semi-annual survey, *Numismatic Literature*—well-organized and easy to use but unfortunately never cumulated. Scholars must simply keep current and assemble their own files of potentially relevant items.

Many of the problems involved in dealing with coins are strictly technical in character—deciphering inscriptions, establishing frequency tables of weights, determining standards of fineness, etc.—and any properly trained numismatist should be able to do these things adequately. On the other hand, applying the results thus obtained, and in fact deciding what data to collect in the first place, is a matter not of technical skill but of historianship. There is no general essay on the roles which numismatics might play in Islamic historical studies; here as in many places models must be found in a few unusually imaginative studies. The problem is that numismatics has been applied with great sophistication to some aspects of Islamic studies, and only ineptly if at all to others—including precisely those topics where coins should be our prime resource.

Numismatics has undoubtedly made its greatest contribution in the fields of political and administrative history. Coins have provided invaluable evidence in determining the regnal dates of obscure princes and the territorial scope of their authority. They have done much to clarify the administrative status of numerous urban centers. Finally, they have been put to good use in defining the links which bound regional dynasts to the Caliphate. Many excellent studies which address such problems could be cited; among them those of George C. Miles are preeminent. As examples, see an early work, *The Numismatic History of Rayy* (1938), and his chapter "Numismatics" in the *Cambridge History of Iran* (1975), Vol. IV, 364–377. An early work of Oleg Grabar, *The Coinage of the Tulunids* (1957), can also be warmly recommended.

In the answering of political and administrative questions, however, numismatics can only have an ancillary role—i.e., we use it to address problems which have been defined by evidence of a different kind, usually textual. The field for which coins ought to be the principal source is the history of monetary systems in Islam. There have in fact been preparatory essays in this field (see in particular the numerous though scattered articles of A. S. Ehrenkreutz), but most have been narrowly "numismatic" in character—i.e., determining the standard of fineness, establishing die counts, etc. There have been efforts to define the circulation of precious metals, but most of this work has been rather speculative and hard to reconcile either with economic theory or with the little hard data which exists. In general, the progress of monetary history has been crippled by the failure of Islamists to evolve an adequate theory of the character and function of money in medieval Islamic society. This theoretical failure has been rather pointedly explored in a series of studies by Gilles Hennequin; among these, see (a) "Problèmes théoriques et pratiques de la monnaie antique et médiévale," *AI*, x (1972), 1–51; (b) "Nouveaux aperçus sur l'histoire monétaire de l'Égypte à la fin du Moyen-Âge," *AI*, xiii (1977), 179–215. Until this "theory gap" is bridged, we cannot expect numismatics to make its full contribution to Islamic history.

D. EPIGRAPHY

Monumental inscriptions of remarkable documentary value were produced in great profusion in medieval Islam, but they have been badly neglected by historians, especially in Great Britain and America. It is true that inscriptions present a variety of technical problems, and these may account in part for the failure of scholars to make better use of them. First of all, they are written in an astonishing range of scripts, some very crude and others superbly calligraphic. In either case they can be extraordinarily difficult to decipher, and in the end the content may be so banal that it hardly seems to have been worth the effort. A second problem is that many, perhaps most, inscriptions have been

badly damaged by man and climate over the centuries, and of course it is always the crucial phrase which has been effaced. Again, since inscriptions are often written on large blocks of fine stone, many have been carted away from their original locations to be reused in entirely unrelated buildings. Real as these problems are, however, they are hardly worse than those which affect the other categories of sources we have reviewed, and the rewards which inscriptions offer should be adequate compensation for the trouble.

We begin with a few general comments about the external characteristics of these texts. Historians normally deal with monumental inscriptions—i.e., texts attached to buildings as part of their structure or decor. However, some texts of historical interest occur in other contexts, such as ceramic and metal vessels, fine textiles, or wooden pulpits and sarcophagi. The majority of monumental inscriptions are engraved in stone, but we also find them carved in stucco or made of colored ceramic tiles (faience) or mosaic. However, inscriptions done in stucco, faience, or mosaic are almost invariably literary or religious in content (most commonly citations from the Qurʾān) rather than dated records concerning specific acts or persons.

Arabic is the language used in the overwhelming majority of inscriptions which fall within the purview of this book. Turkish first appears in the early 9th/15th century, and only becomes widely used in the 10th/16th. As to Persian epigraphy, we find the first examples at the end of the 5th/11th century. Though Persian came to be used in an increasingly broad array of contexts, it never entirely supplanted Arabic, which was always the preferred language for religious texts and founders' inscriptions.

We do not have room to deal with the scripts in any detail. Down through the 5th/11th century most are carved in some form of Kufic, and this script remained very popular in later periods for literary and religious texts because of its striking ornamental potentialities. The development of Kufic can best be followed in the richly documented and beautifully produced study of Adolf Grohmann, *Arabische Paläographie*, II, *Die Lapidarschrift* (1971), which contains a full bibliography up to the date of publication. On the specific problems connected with the lovely but appallingly difficult style called "floriated Kufic," see Grohmann, "The Origin and Early Development of Floriated Kufic," *Ars Orientalis*, ii (1957), 183–215. From the 6th/12th century on, various forms of *naskhī* came to be used almost universally for such information-conveying texts as epitaphs, decrees, notices of construction or restoration, etc., but this script is only beginning to attract serious study. In later centuries, Persian and Turkish inscriptions would make much use of such elegant scripts as *taʿliq* and *nastaʿliq*, but these need not concern us here.

There is no handbook of Islamic epigraphy, but a sound introduction to the field can be found in the article "Kitābāt," *ET*, V, 210–233, by various authors. The introductory section, by J. Sourdel-Thomine, is a wide-ranging statement on the development and general problems of Islamic epigraphy; the succeed-

ing sections (by various authors) are each devoted to the inscriptions of a particular region, with an emphasis on the development of scripts. An overview of this kind is best followed up by the study of specific studies which can serve as models of epigraphic method. An excellent example would be Khālid Muʾādh and Solange Ory, *Inscriptions arabes de Damas: les stèles funéraires*; I, *Cimetière d'al-Bāb al-Ṣaghīr* (1977). This survey contains eighty inscriptions, dating from 439 to 935 A.H. Each inscription is presented in a plate of good quality (with additional line drawings in exceptionally difficult cases), printed transcription, and translation. In addition, each inscription is furnished with an analysis of its script and textual contents, a careful description, and a precise localization. Finally, the authors give us a general discussion of the scripts and formularies used in this body of inscriptions. This study of course does not meet every need of the novice epigrapher: epitaphs are a limited genre at best, and seldom carry the more florid scripts or more complex verbal formulae.

Although inscriptions were commonly used by the ancient Middle Eastern monarchies, including those of the Hellenistic and Roman period, to recount major political events (victories, coronations, etc.), they almost never serve this function in Islamic times. Perhaps the widespread availability of paper made the chronicle and the official letter a more effective means of achieving such self-glorification. However that may be, the contents of Islamic inscriptions may conveniently be grouped in four classes: (1) literary; (2) religious; (3) commemorative; (4) legal and administrative.

Literary texts are found only in two contexts: on palaces and on luxury objects such as metalwork and decorated ceramics. In the case of art objects, the inscription (incised or painted) is most often just a cliché or a piece of doggerel—e.g., "Glory and prosperity to the owner of this vessel." On the other hand, Iranian ateliers in particular did produce many pieces decorated with identifiable lines of verse. As for palaces, very few of these have survived, but two of them present inscriptional programs of remarkable significance, that of Masʿūd III (492–508/1099–1115) in Ghazna, and the Alhambra in Granada. On Masʿūd's palace see Alessio Bombaci, *The Kufic Inscription in Persian Verses in the Court of the Royal Palace of Masʿūd III at Ghazni* (1966). The publications relevant to the Alhambra inscriptions can be traced through Oleg Grabar, *The Alhambra* (1978); see especially the notes to Ch. 2.

The religious texts used in monumental inscriptions are overwhelmingly taken from the Qurʾān. In the past it has been normal to consider such passages as banal and historically insignificant. In many cases this point of view is probably valid, for most mosques and madrasas draw their Qurʾānic inscriptions from a very limited repertory of verses. But we cannot take this for granted. For example, in his discussion of the mosaic inscription in the Dome of the Rock, Oleg Grabar (*The Formation of Islamic Art* [1973], pp. 48–67) argues for a very specific anti-Christian, anti-Byzantine message in that text.

Likewise, the Qur'anic passages carved on the Fatimid mosques and shrines of Cairo spell out (for those who know how to interpret them) crucial elements of Ismā'īlī ideology; see two studies by Caroline Williams: (1) "The Cult of Aḥīd Saints in the Fatimid Monuments of Cairo, I: The Mosque of al-Aqmar," *Muqarnas*, I (1983), 37–52; "II: The Mausolea," *Muqarnas*, iii (1985), 39–60; (2) "The Qur'anic Inscriptions on the *Tābūt* of al-Ḥusayn," *Islamic Art*, ii (1987), 3–13. In general, we should work from the assumption that the Qur'anic inscriptions on a mosque or any other religious structure constitute a conscious program, and hence are a vital key to the intended meaning of that building. Qur'anic passages are often done in extremely ornate if not impenetrable scripts; in the many situations where only a few words can be made out with some confidence, a concordance like 'Abd al-Bāqī's *al-Mu'jam al-mufahras* (see above, p. 21) is an indispensable aid.

Commemorative inscriptions fall into two sub-classes. Most common are epitaphs, which typically give a person's name, genealogy, official titles, a few pious slogans, and date of death. It seems a very thin body of data, but these few facts can be exploited to good effect. They can for example help us uncover the notable families of a district and some of the kinship links among these families, all the more since women as well as men are included. Epitaphs can establish or confirm the death and regnal dates of rulers, and supply official titulature.

The second class of commemorative inscriptions—foundation and restoration texts on public buildings—can be put to even broader use. Typically, inscriptions of this kind will contain the following data: the function embodied in the building (e.g., *masjid*, *jāmi'*, *mashhad*, *turba*, etc.); the kind of work done (original construction, restoration and repair, conversion); the name, genealogy, and titulature of the person at whose behest the work was done; sometimes, but not always, the names and titles of the officials who actually oversaw the work; the date on which the work was ordered or completed. The value of such information is manifold. By comparing the information given in the inscription with the monument on which it is located, historians of architecture can establish precise and valid correspondences between form and terminology. By using inscriptions to track down the most visible patrons of architecture within a given period and locality, key members of the socio-political elite can be identified, since the funding of major construction projects requires wealth, prestige, and power. Or finally, the titles of the men named in the inscriptions can clarify many details of local or provincial administration. Such examples of course only suggest a few of the possibilities offered by inscriptions.

For commemorative inscriptions to be used in these ways, however, they must be integrated into a broad archaeological and historical context, and only a few scholars have endeavored to do this in any systematic way. Among these the preeminent figure is Max van Berchem, whose *Matériaux pour un Corpus*

Inscriptionum Arabicarum (abbr., *CIA*), though sadly incomplete, remains one of the great monuments of Islamic studies and a model of what epigraphy in our field might achieve. Van Berchem not only gives critical transcriptions and translations of the texts, but extended discussions of the monuments on which they are found and the historical situations in which they were composed, together with lengthy and fascinating discourses on such matters as titulature, the evolution of administrative offices, etc. Obviously much of what he has to say is obsolete, but the sense of discovery in these volumes, as well as his capacity to suggest fruitful lines of inquiry, are still very vivid indeed. In addition to *CIA*, van Berchem did a great many other epigraphic studies, which were intended as preparatory studies for his *magnum opus*; these have been collected in his *Opera Minora* (2 vols., 1978). Finally, he made an extremely valuable collection of photographs, which have now been catalogued by Solange Ory, ed., *Archives Max van Berchem, I: Catalogue de la photographie* (1975).

CIA was planned as a cooperative venture, and in fact several of his associates did contribute one or more volumes. Still, van Berchem was the heart and soul of the project, and his death in 1921 brought it effectively to an end. The volumes published after that time for the most part represent a picking up of loose ends, not fresh research. The following volumes have been published:

- a. *Égypte, le Caire*: Max van Berchem, *MMAF*, xix (1896–1903); Gaston Wiet, *MIFAO*, iii (1930).
- b. *Syrie du Sud, Jérusalem*: Max van Berchem, *MIFAO*, xliii (1922–23); xliv (1925–27); xlv (1920).
- c. *Syrie du Nord, Tripoli*: Moritz Sobernheim, *MIFAO*, xxv (1909).
- d. *Syrie du Nord, Alep*: Moritz Sobernheim and Ernst Herzfeld, ed. E. Combe, *MIFAO*, lxxvi–lxxvii (1954–56).
- e. *Asie Mineure, Sivas et Divrigi*: Max van Berchem and Halil Edhem, *MIFAO*, xxix (1910–17).
- f. *Arabie: La Mekke*: H. M. al-Hawary and N. Elisséeff, *MIFAO*, cix (1985).

For a long time Van Berchem had no real successors; many highly accomplished scholars shared his approach and concerns, to be sure, but only Gaston Wiet ever attempted a new volume, or even a thoroughgoing revision of an old one, in *CIA*. However, the recent contribution by Hawary and Elisséeff and a projected volume by Sheila Blair (for which see below) suggest a revived impetus to achieve at least part of van Berchem's vision.

In the intervening seventy years, important new material has come out from time to time; though we cannot give any adequate survey of titles here, certain scholars have made particularly substantial contributions in this field: Gaston Wiet, Jean Sauvaget, Nikita Elisséeff, Dominique Sourdel, Janine Sourdel-Thomine, Heinz Gaube. In Spain, a good initial corpus was published by E. Lévi-Provençal, *Inscriptions arabes de l'Espagne* (1931), and in recent years

several scholars (most notably M. Ocaña Jimenez) have continued to build on this foundation. Two very important projects do deserve special notice. First, Moshe Sharon has announced a corpus of the Arabic inscriptions of Palestine: "Un nouveau corpus des inscriptions arabes de Palestine," *REI*, xlii, no. 1 (1974), 185–191. Second, the Sourdels have undertaken a critical re-edition, with a concise but valuable annotation, of the inscriptions of Damascus, which have heretofore been scattered among a myriad of extremely uneven publications. The first installment of this survey, covering twenty-one inscriptions dating from 444/1052 to 544/1149, has appeared as "Dossiers pour un *Corpus* des inscriptions arabes de Damas," *REI*, xlvii, no. 2 (1979), 119–171.

It is evident from our discussion so far that Syria and Egypt have been privileged territories. The crucial region of Iran in particular remains from an epigraphical point of view almost *terra incognita*, though an important initial step had been taken before the 1979 revolution, with the establishment of a *Corpus Inscriptionum Iranicarum*, devoted to the publication of Persian-language inscriptions from earliest antiquity down to Safavid times. So far, however, only two slender volumes have been devoted to the Islamic period: on Khurasan, ed. William Hanaway, (Vol. II, 1977); and Mazandaran, ed. A.D.H. Bivar and E. Yarshater (Vol. VI, 1978). These publications are unfortunately extremely concise, consisting only of plates and terse identifications, without the systematic transcriptions, translations, and annotation needed to elucidate these texts. Far more valuable will be a volume now in press by Sheila Blair, *A Corpus of Early Arabic Inscriptions from Iran and Transoxania (to A.H. 500)*, which adheres to *CIA*'s general approach in its presentation and analysis of seventy-six inscriptions.

Finally, we come to inscriptions of legal and administrative content. Under the Roman Empire it was very common for decrees to be "published" in the form of inscriptions on temple walls, triumphal arches, etc. This practice was far less widespread in the Islamic world, but it was occasionally followed. Jean Sauvaget published in exemplary fashion two collections of such material: (a) "Décrets mamelouks de Syrie," *BEO*, ii (1932), 1–52; iii (1933), 1–29; xii (1947–48), 5–60; (b) *Quatre décrets seldjoukides* (1947). Far more common than the official decree was another kind of document, the deed of *waqf*. When a school or mosque was built or given some additional endowment, the benefactor would often carve an inscription in a prominent spot on the building, identifying himself, the objects of his charity, the main properties which he had donated, and the date of the grant. Such inscriptions had no legal force in themselves, but were simply resumes of the official deed of *waqf* registered with the courts; even so, their value for the study of social and economic history should be obvious.

Obviously we do not have the kinds of reference and research tools that we need for a really effective use of inscriptions in historical research. However, we do have a most useful interim survey in the *Répertoire chronologique*

d'épigraphie arabe (abbr., *RCEA*; 17 vols., in progress; 1931–1982). *RCEA* attempts to bring together all known Arabic inscriptions, both those previously published (whether well or badly) and also items collected but left unpublished by van Berchem, Sauvaget, Wiet, et al. It makes no effort to be critical; badly deciphered, duplicate, and spurious texts abound. It uses both a chronological and geographical framework—all the inscriptions for each year are brought together, and within each year citations begin with the westernmost sites and move toward the east. Each text is given in printed transcription and French translation only, without photographs. However, sources and places of publication are cited, so that there is at least this degree of control. There are no historical or archaeological notes; it is up to the reader to reconstruct the context in which these texts occur. *RCEA* still goes down only to 783/1381, so that a vast body of material remains untouched. Finally, the transliterations of the locales where the inscriptions were found are highly arbitrary—French imperial orthography at its worst—and cause much wasted time simply in tracking down place names, though the *Index géographique* (1975) for the first 16 volumes does ameliorate this problem. It should also be said that T. XVII, edited by Ludvik Kalus, shows a marked improvement in procedure and format.

In short, in spite of a series of major efforts throughout the 20th century, we still have nothing comparable to what Theodor Mommsen and his colleagues bequeathed to Roman history a hundred years ago, and there is little prospect that we ever will.

E. ART, ARCHAEOLOGY, AND TECHNOLOGY

Because history is a verbal representation of human behavior, it is natural that it should rely most heavily on the evidence of words. However, such evidence can be highly misleading in regard to societies like those of medieval Islam, where the art of writing was the monopoly of a small cultural elite. And even in broadly literate societies, material artifacts are far more productive forms of evidence for many aspects of life than are "mere words." This statement applies not only to such obvious areas as technology or the apparatus of daily life, but in many cases even to social relations and to cultural symbols and values. Obviously no one object is usable evidence for every aspect of the society which produced it, but every artifact is multivalent and throws light on many areas of life. For example, glazed ceramics can be evidence for aesthetic values, for the technology which produced them, for the economic and commercial milieu in which they were made, and (if they have figurative decor) for widely used visual symbols of the period. An artifact of a very different kind, the layout of a city marketplace, can be a mine of information on business organization, class structure, etc. As an inquiry develops, then, even the most

text-minded scholars need to make an effort to canvass and utilize the possible artistic and archaeological evidence for their subject.

It must be said that very few Islamic historians are trained to do this, in large part because until the late 1960s there were (at least in the United States and Canada) almost no art historians and archaeologists whose primary interest was the Islamic world. This gap is now well on the way to being rectified, but it will still be some time before the majority of social and political historians are in any position to use the work of art historians and archaeologists productively. Even when people are ready to look in that direction, caution and a degree of humility will be needed, for art history and archaeology are highly developed and self-conscious disciplines and neither can be mastered without a substantial apprenticeship. For this reason we shall not try to deal seriously with problems of method here. An overall assessment of the state of these fields—still largely valid—can be found in Oleg Grabar, "Islamic Art and Archaeology," in L. Binder, ed., *The Study of the Middle East* (1976), pp. 229–264. For archaeology, a critique of method through an analytic presentation of a case study is given in C. L. Redman, "Archaeology in a Medieval City of Islam," *MESA Bull.*, xiv, no. 2 (1980), 1–22. Many archaeologists would disagree with Redman's stress on the scientific rather than cultural character of archaeology, but views like his are currently very influential.

There are still very few synthetic works which attempt to integrate the approaches and results of art history and archaeology within a broad interpretation of Islamic history. Two fairly recent works are successful in this endeavor, however, and in addition suggest many interesting lines of inquiry:

Dominique and Janine Sourdrel, *La civilisation de l'Islam classique* (1968).

Oleg Grabar, *The Formation of Islamic Art* (1973; 2nd ed., 1987). (Has an excellent bibliographic essay covering topics down to ca. 900 A.D.)

For architecture—perhaps the single most important dimension of art for social and political history—there are now several good surveys, but historians might benefit most from a recent collective work edited by George Michell, *Architecture of the Islamic World; Its History and Social Meaning* (1978), which goes beyond the standard emphasis on great monuments to look at the social functions of architecture. Particularly significant are the chapters on marketplaces and ordinary private homes. The text is very general, as one would expect in this class of book, but an attentive reader will find many useful ideas to pursue.

For most of the periods and regions of medieval Islam, we still lack adequate repertoires of monuments and objects, let alone the kind of detailed survey which provides a rigorous description of all the extant buildings or artifacts which fall within a defined area of interest. An early attempt at a general survey was made in Henri Saladin, Georges Marçais, and Gaston Migeon, *Manuel d'art musulman* (4 vols., 1907–1927), which covers both

architecture and the plastic and industrial arts. Obviously it is now thoroughly obsolete; the best comprehensive overview currently available is probably Janine Sourdrel-Thomine and Bertold Spuler, *Die Kunst des Islams* (1973), Vol. IV of the *Propylaen Kunstgeschichte*. It is both scholarly and beautifully produced, though its focus on individual masterpieces prevents it from dealing effectively with regional developments, broad cultural problems, etc.

In an ideal world, every region and every category of art would be covered by something like the monumental productions of K.A.C. Creswell:

Early Muslim Architecture (2 vols., 1938–40; 2nd revised ed. of Vol. I, in 2 parts, 1969).

The Muslim Architecture of Egypt (2 vols., 1952–59).

It is hard to think that we will ever again see anything like these magnificent volumes—in folio size, with meticulous descriptions, accurate measurements (otherwise almost unknown in the Islamic field!), and superb drawings and plates for every monument. *Early Muslim Architecture* covers all the central Islamic lands down to ca. 900 A.D., while the volumes on Egypt focus on the period from the Ikshidids through the early Mamluks (939–1326). Creswell has his faults, to be sure, among which his tight focus on technical problems will be most apparent to new readers, but his work remains the foundation for all further progress. The well-documented later Mamluk period in Egypt has yet to be surveyed, but a number of palatial private homes from this and the early Ottoman period survive, and these can be studied in the admirable survey of J. Revault, B. Maury, and M. Zakariya, *Palais et maisons du Caire du xiv^e au xviii^e siècle* (4 vols., 1975–83). The results of their work on the Mamluk period have been placed in a broader architectural and social-historical context in a separate volume: J.-C. Garcin, B. Maury, J. Revault, M. Zakariya, *Palais et maisons du Caire, I: époque mamelouke* (1982). (Working with other collaborators, Revault has also produced similar surveys of late-medieval domestic architecture in the North African cities of Tunis and Fez.)

For other regions and genres, there is much less to work with, in spite of several meritorious surveys and a growing number of solid monographs. For Spain and North Africa, Georges Marçais, *L'architecture musulmane de l'Occident* (1954) is an excellent synthesis. At the other end of the medieval Islamic world, a splendid collective work dealing with all periods and genres was edited by A. U. Pope and Phyllis Ackerman, *A Survey of Persian Art* (6 vols., 1938–39; index vol. by T. Besterman, 1958; repr. in 14 vols., 1964–67). This work is very uneven and is now obsolescent, but its comprehensiveness and its superb plates continue to make it indispensable.

When we move from regional to genre-oriented surveys, a few works are particularly precise and wide-ranging. The development of early Islamic painting (down to the 8th/14th century, with a natural emphasis on manuscript illustration) is treated in the classic study of Richard Ettinghausen, *Arab Paint-*

ing (1962). The two volumes by Arthur Lane on ceramics are now old but remain a useful and reliable introduction to the subject: *Early Islamic Pottery* (1947); *Later Islamic Pottery* (1957). A new and lavishly produced book by Jean Soustiel, *La céramique islamique* (1985), supplants Lane in many respects. Like its predecessor it focuses on masterpieces, and in general addresses the interests of the collector and museum curator rather than the historian. (See the review essay by Oleg Grabar in *Muqarnas*, v [1988], 1–8.) The field of metalwork—one of the finest achievements of Islamic art—has at last received a reliable and well-documented overview from Eva Baer, *Metalwork in Medieval Islamic Art* (1983). She does omit certain classes of work from consideration (e.g., arms and armor), and the plates, while perfectly usable, are much less impressive than the text. The vast gaps in our coverage are all too apparent—textiles, glass, Persian painting in the post-Mongol era, the architecture of the Fertile Crescent and Iran in the Middle Periods (900–1500). Clearly it will be the work of decades to fill these in any adequate way.

Under these circumstances especially, museum and exhibition catalogs are often of enormous value. Unfortunately, very few museums have attempted to publish comprehensive catalogs of their Islamic collections. What can be done is illustrated by two of the volumes produced for the Museum of Islamic Art in Cairo by Gaston Wiet:

1. *Catalogue général du Musée Arabe du Caire: lampes et bouteilles en verre émaillé* (1929).
2. *Catalogue général du Musée Arabe du Caire: objets en cuivre* (1932).

Since Wiet's work, the only museum to undertake a catalogue on the same scale is the very important Benaki Museum of Athens, originally established as a private collection at the turn of the century by a Greek residing in Egypt, Anthony Benaki. As the first part of a proposed *Catalogue of Islamic Art in the Benaki Museum* under her general editorship, Hélène Philon has recently produced a splendid volume, *Early Islamic Ceramics* (1980). Further volumes on later ceramics, woodwork, textiles, metalwork, jewelry, and tombstones have been announced, each to be done by a well-known specialist.

A different type of publication altogether is the exhibition catalog, which presents the objects gathered together for a particular occasion. The value of these of course depends heavily on the conception governing the exhibition in question and on the curator's skill in obtaining loans of the most appropriate pieces. A particularly fine recent example, on both the scholarly and aesthetic level, would be Esin Atıl, *Renaissance of Islam: Art of the Mamluks* (1981), which is unquestionably the best account we have of Syro-Egyptian art between the 7th/13th and 9th/15th centuries.

We usually think of art as a cultural and aesthetic phenomenon, but it is no less an embodiment of technology. Art undoubtedly expresses what was felt to be important or beautiful, but it also conveys the manufacturing skills availa-

ble to a given society. For this reason, the full exploitation of art as evidence for political and social history requires a knowledge of the materials and techniques that produced it. The study of medieval and "traditional" Islamic technology is unfortunately still in its infancy. However, two very different works bring together most of what is known. In *Islamic Technology: an Illustrated History* (1986), A. Y. al-Hassan and D. R. Hill comb texts, manuscript illustrations, and artifacts to reconstruct a very impressive array of arts and manufactures: shipbuilding, textiles, irrigation, metallurgy, et al. Both authors are engineers as well as scholars, and that fact obviously enhances the value of their work. Hassan and Hill's historical study should be read in tandem with Hans E. Wulff's invaluable *The Traditional Crafts of Persia* (1966). Wulff's meticulous account is based on direct observation of artisans at work during his lengthy residence in Iran in the 1930s, and covers agriculture and building as well as industrial crafts. Finally, we now have an important work on architecture: Ca'fer Efendi, *Risāle-i Mî mārīyye: an Early Seventeenth-Century Ottoman Treatise on Architecture*, annotated trans. by Howard Crane (1987). Works of this kind are extremely rare, since pre-modern Muslim architects hardly ever wrote about their craft. Medievalists must obviously use this text with caution, since Ottoman architecture is very distinctive and indeed unique. Even so, it gives us direct if partial access to the way in which Muslim builders understood their work.

The archaeological and art-historical literature is very scattered, and important contributions often crop up in very unlikely places. In this area, however, we are well provided for, at least for older publications: K.A.C. Creswell, *A Bibliography of the Architecture, Arts, and Crafts of Islam* (1961), to which the same author issued a *Supplement* going down to 1972. It is meticulously and logically organized. The original volume includes titles in Arabic and Persian, while the supplement adds Turkish and Russian. For some entries Creswell adds terse and typically acerbic comments. From 1972 on, we must fall back on the *Index Islamicus*.

Islamic archaeology is more obviously connected with the concerns of social and political historians than is art history, but it has not yet made the contributions to historical studies which we might hope for. There are many reasons for this. Until very recently, very few archaeologists had any interest in the Islamic period, and tended to regard the "Saracen layers" at their sites mostly as a nuisance. On the other hand, very few Islamists had any archaeological training, perhaps because so much material from medieval Islam is still above ground and even occupied. Yet even at the beginning of this century the work of Friedrich Sarre and Ernst Herzfeld at Samarra showed what could be gained from archaeology. Fortunately, during the last two decades the pace of excavation at the hands of serious archaeologists has picked up sharply, and at least until the troubles of the last decade work was being actively pursued throughout the central Islamic lands.

It would obviously be extremely useful to have a comprehensive survey of all the sites where significant archaeological work has been done, with summaries of the main data, general conclusions, critical bibliographies, etc. An excellent model for such a survey can be found in L. Vanden Berghe, *Archéologie de l'Iran ancien* (1959), and its (somewhat belated) companion volume, *Bibliographie analytique de l'archéologie de l'Iran ancien* (1979)—works which are obviously important for scholars of early Islamic Iran. A very important work on Afghanistan should also be noted: Warwick Ball and Jean-Claude Gardin, *Archaeological Gazetteer of Afghanistan* (2 vols., 1982). The authors survey some 1200 sites, beginning with the oldest remains known and coming down to the end of Timurid times. It is based wholly on published descriptions and reports, but obviously these are all we shall have for a long time to come.

Archaeology is no longer an affair of free-lance amateurs; legal excavations at least are always carried out either by national antiquities services or by officially recognized foreign research institutes. It will thus be useful to list those organizations which regularly sponsor work on the Islamic period, and which have well-established publications series in which the results of this work are likely to appear. We cannot cite every potentially relevant organization and journal, but those listed below are responsible for the bulk of published work in Islamic archaeology.

American Research Center in Egypt

Journal of the American Research Center in Egypt (abbr., *JARCE*)

British Institute of Archaeology at Ankara

Anatolian Studies

British Institute of Persian Studies

Iran

British School of Archaeology in Iraq

Iraq

(Note that all three of the British journals publish annual reviews of current excavations within their respective countries of interest.)

Centre National de la Recherche Scientifique (Paris) (abbr., CNRS)

Archéologie méditerranéenne (abbr., *Arch. méd.*)

Deutsches Archäologisches Institut, Abteilung Kairo (abbr., DAI)

Mitteilungen (annual; abbr., *DAI (Kairo), Mitt.*); *Abhandlungen, Islamische Reihe* (occasional; abbr., *DAI (Kairo), Abh.*)

DAI, Abt. Istanbul

Istanbuler Mitteilungen (annual; abbr., *Ist. Mitt.*); *Istanbuler Forschungen* (occasional; abbr., *Ist. Forsch.*)

DAI, Abt. Teheran

Archäologische Mitteilungen aus Iran (annual; abbr., *AMI*); *Teheraner Forschungen* (occasional; abbr., *Teh. Forsch.*)

Délégation Archéologique Française en Iran

Cahiers (abbr., *CDAF*); *Mémoires* (occasional; abbr., *MDAF*)

Institut Français d'Archéologie Orientale au Caire (successor to the Mission Archéologique Française au Caire)

Mémoires de la Mission Archéologique Française au Caire (abbr., *MMAF*); *Mémoires publiés par les membres de l'Institut Français d'Archéologie Orientale au Caire* (abbr., *MFAO*); *Bulletin de l'Institut Français d'Archéologie Orientale au Caire* (abbr., *BFAO*); *Annales Islamologiques* (abbr., *AI*).

Institut Français d'Études Arabes à Damas

Bulletin d'études orientales (*BEO*)

Iraq, Directorate General of Antiquities

Sumer

Nederlands Historisch-Archaeologisch Instituut te Istanbul

Anatolica (annual); *Uitgaven* (occasional; abbr., *Ist. Uitgaven*)

Saudi Arabia, Department of Antiquities

al-Atfal

Syria, Direction generale des Antiquites et des Musees

Annales archéologiques de Syrie (since 1969, *Annales archéologiques syriennes*; abbr., *AAS*)

There are many important archaeological journals not listed here—e.g., *Syrie, Berytus, Israel Exploration Journal*—but these almost never deal with Islamic topics and it seems best to exclude them. In any case, there is obviously a rich and rapidly growing fund of archaeological data and interpretation for those historians who are prepared to learn how to use it.